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THE UNIVERSITY OF ALBERTA

HOME ECONOMICS IN SWAZILAND: A CURRICULUM EVALUATION

BY

© CHARLENE HAY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND

RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF EDUCATION

IN

COMPARATIVE AND INTERNATIONAL EDUCATION

DEPARTMENT OF EDUCATIONAL FOUNDATIONS

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SPRING 1989

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled HOME ECONOMICS IN SWAZILAND: A CURRICULUM EVALUATION submitted by CHARLENE HAY in partial fulfilment of the requirements for the degree of MASTER OF EDUCATION in COMPARATIVE AND INTERNATIONAL EDUCATION

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Date: November 9, 1988

ABSTRACT

This study is an evaluation of the junior secondary home economics curriculum in Swaziland. Home economics, being the study of the family, can help people to manage limited resources. The effect this course can have is limited by the political and economic milieu in which the education system and the family exist, and by the small number of people who study home economics. The research problem was to discover whether this course contributed to the 'development' of the country, development defined as an improvement in the lives of the masses. The study attempted to discover attitude and behavior change in respondents who had completed the course. Naturalism, which aims to discover patterns which occur in nature, rather than specifying variables in advance, was selected as the best method to research attitudes and behaviors, especially those in a foreign cultural context. Data were collected in 1987.

The discussion begins with an analysis of the political economy of Swaziland as it has evolved through history. Autocratic indigenous leadership has continued and traditional production on the homestead has been maintained along with the introduction of wage labor. Foreign capital flourishes in an environment where wages can be extremely low with this supplement from the homestead. Formal education, initially providing a route to a well-paying job, no longer does so. The education system has been designed to produce needed manpower and not universal literacy. The lifestyle of the family has been altered by changes in the economy. No longer able to produce

enough food, the family is malnourished because wages do not enable families to purchase adequate food. Most able bodies are drawn into wage labor. Cattle no longer produce large quantities of milk due to a shortage of grazing land. Disease spreads through contaminated water.

The study makes recommendations on changes to the curriculum so that it can more effectively contribute to the development of Swaziland.

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Several people and organizations contributed in a major way to the success of this study and I will take this opportunity to thank them. The Canadian International Development Agency (CIDA), granted me a scholarship which allowed me to travel to Swaziland to collect the data. Without this funding, the inquiry could not have been conducted. Mrs. Muriel Mabuza, Senior Inspector of Home Economics in Swaziland, was extremely helpful in providing me with information and suggestions on how to make the research more useful to her. I also thank Mairi Maguire, for the insights she provided concerning issues related to health in Swaziland. Dr. Kazim Bacchus, my supervisor, has been supportive of the study from its inception and made valuable contributions throughout the process of writing the thesis. I also thank the respondents for their contributions. Finally, I thank my husband, Gordon Hay, for his help with proof-reading.

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CHAPTER 1
INTRODUCTION

Home economics is the study of the family. In its most basic sense it examines the provision of food, clothing and shelter for the family. In broader terms, home economics is concerned with the relationship between the family and the society of which it is an integral part. An important element in the physical well being of the family is obviously the availability of resources and in a Third world country such as Swaziland, where resources available to the family are severely limited, an understanding of this subject can play an important role in helping people manage these limited resources in a more efficient manner.

Swaziland is a small country in southern Africa which, except for a small eastern border with Mozambique, is completely surrounded by South Africa. Its total area is 17,000 square kilometers, an area approximately equivalent to that of Wales.* The Swazis are a distinct African tribe, with a culture and language which they are proud to call their own. Both the culture and the language are, however, similar to those of some surrounding tribes. The country is fairly unique in Africa, being populated by one tribe only. This makes the population, which was 625,000 in 1984*, very homogenous in nature.

* Swaziland Annual Statistics Bulletin, 1984, p.1.

The second chapter, which describes the research project and the methodology which was employed, begins by pointing out that the effectiveness of the junior secondary home economics curriculum is severely limited by this milieu in which the education system and the family exist. And aside from the constraints imposed from outside education, the proportion of students who study home economics is a very small percentage of the total number of young people of the appropriate age. Not all children in this age group attend school, the course is not offered in all junior secondary schools, and those who take the course comprise for the most part only a proportion of the female students. Recognition of the constraints that limit the effectiveness which home economics can have with improving family life, helps to put the evaluation of the success of the program in its proper perspective.

This research project aimed to discover whether the junior secondary home economics curriculum has contributed to the development of Swaziland in terms of improving the life of the average person. The means by which this inquiry proceeded was through the search for attitude and behavior change toward the provision of basic needs of family members when minimal resources are available. It has been acknowledged that the shortage of resources available to the family and the minimal authority of young women in the family unit may prevent a change in attitude from becoming a change in behavior. However, the results indicate that many respondents who had completed the home economics course had already begun to change their behavior by improving hygiene around the homestead and by

utilizing and preparing more nutritious food. The assumption is then made that the likelihood of behaviors changing increases as the woman grows older and acquires more authority.

When home economics was first introduced into the formal education system, the course helped to make students more aware of the Western culture which was invading their lives and it prepared them to participate more effectively in the market economy. Over the years there were some changes in the curriculum aimed at making it more appropriate for Swazi students. But even with these changes the course did not do enough to prepare them to deal with the changes their families were undergoing. The curricular reform which this research has examined, and which was implemented in 1983, attempted to create a syllabus that was more functional for the Swazis. Two major changes were made to the curriculum--first, the two separate subjects of *Domestic Science* and *Needlework* were integrated to form the course called *Home Economics* . This was done to give the students a broader understanding of family life. The second major change involved the incorporation of new topics into the course. While minor changes were made to existing topics, two major sections were added--*family living* and *health and hygiene* . The time allotted for teaching the new course was only slightly longer than previously had been available to each of the two separate courses.

Data were collected through guided, but open-ended interviews using a naturalist approach. Naturalism aims to discover patterns which

occur in nature, rather than specifying variables in advance as is done with the 'scientific' research paradigm. This technique was selected as the best means of gathering information on attitudes. Being subjective and complex, attitudes can only be explored using a paradigm which allows the researcher the freedom to probe and discover these attitudes. The one-to-one communication provided ideal opportunities to do this. It provides an opportunity for the researcher to explain to the respondents, whose native tongue is not English, what information is desired of them. In a similar way, the opportunity to establish a clear understanding of the information being given by the respondent is provided through the close interpersonal communication. In addition, this technique allowed for the discovery of relevant variables which were not laid out in advance. This method which makes no presumptions, but builds on information provided by respondents, prevents the research from being limited by rigid preconceptualization of variables.

Data for this research project were collected in February and March of 1987, the beginning of the fifth academic year during which the program had been operating. With the help of Mrs. Muriel Mabuza, Senior Inspector of home economics in Swaziland, contact was established with the four schools which were selected to be part of the project. Each school was in a different geographic area of the country, two of the schools were situated in towns and two were rural schools with boarding facilities. Interviews were arranged with students who were just beginning the course, students who had completed the course, home economics teachers and headmasters.

The interviews were conducted on a one-to-one basis in private quarters. The project was explained to each respondent, confidentiality of their responses was ensured and respondents were encouraged to be open with their comments and observations in the interest of improving the home economics program. A written record was kept of verbal and non-verbal responses and this record was transcribed to a more complete account shortly after the interview was complete.

Discussion begins, in chapter III with an analysis of the political economy of Swaziland as it has evolved through history and in particular, the changes which resulted when the Europeans began to settle in southern Africa. The European presence produced a political reorganization of all southern African tribes, which resulted in the Swazis, along with other tribes, becoming unified and settled in one area. Part of the reason why the Swazis were successful in maintaining themselves as a political unit at a time when many groups of people were destroyed, was the strength of their leadership.

European influence continued to change the internal structure of the Swazi tribe, as settlers in the area which is now South Africa began to seek land and other economic concessions from the Swazi leaders. Concessions were granted in such great numbers that the southern African settlers of Dutch descent (Boers) came close to a complete *de facto* takeover of the country. An ongoing conflict between British and Boer, the two major groups of European settler in South Africa,

was resolved with the British victory over the Boers at the conclusion of the Boer War in 1902. Swaziland then became a British protectorate, and the Swazis fought to regain economic control over their territory, a goal which they never fully achieved.

Swaziland became politically independent from Britain in 1968, after Britain resolved not to turn the territory over to the South Africans. Leadership has remained strong in the country; the masses have been depoliticized and the monarchy maintains control over land and labor. The ruling class has worked very closely with foreign capital, which is mainly from Britain and South Africa. Part of the adult population has been forced into the work force, and by maintaining traditional production on the homestead, these workers can be paid wages below what would be necessary to support their families. The detailed analysis of Swaziland's political economy is the substance of this chapter.

A general discussion of education follows with an outline of education as it has changed from traditional, informal education to an academically-oriented, Western type of schooling. Education in Swazi society prior to the European influence was conducted within the family and also via the military organization of young people. In both situations young people learned values which served to maintain the social order. Formal education was not a British priority until after World War II, when the colonial power realized that the territory was well endowed with natural resources. Britain then began to invest in all sectors of the Swazi economy and in

education so that young people would be prepared to play an active role in that economy. The Swazi leaders welcomed formal education, believing it was a means to regain control over their territory.

Opportunities for schooling increased, particularly during the decade following independence. Educational opportunities are, however, still elective, fees are charged for the privilege of attending, and the curriculum is highly academic in its orientation. While in its early years, this formal and academic education provided a sure route to a wage-paying job, this is no longer so, even for graduates from high school or post-secondary institutions. However, people still have faith that education will lead them out of their poverty, and parents are not willing to spend their limited resources to provide their children with a more practically oriented type of schooling. Nevertheless, education must help provide people with the skills needed to improve their lives on the homestead if it is to help the country develop. This discussion of education in Swaziland is detailed in Chapter IV.

Since home economics is ultimately concerned with the well being of the family, an analysis of the changes which the Swazi family has experienced has been attempted in Chapter V. This begins with a description of family life in the times prior to European influence when the Swazis were primarily a nomadic people who sparsely populated the area they inhabited. The traditional family lived fairly well with the resources available--there was sufficient food, the diet supplied all of the essential nutrients and water was not

contaminated. The family was a very stable social unit with a division of labor in which responsibilities were fairly evenly distributed between men and women.

Swazi society changed with the arrival of the European to southern Africa and the family has been forced to live under drastically altered conditions. For example, changes to food consumption patterns which have affected the family most have resulted in the diet becoming one which is deficient in protein and the children have begun to suffer from protein malnutrition. Reasons for the changed diet are twofold: the family is no longer able to produce enough food and they are now purchasing some of their food items. Loss of labor through family members entering wage-earning jobs and children going to school usually leaves only the women at home to perform all of the necessary tasks around the homestead. Since cattle can no longer produce much milk, due to a shortage of grazing land, families rely on maize as their staple food. There is not enough labor left on the homestead to produce the amount of maize needed by the family and maize contains much less protein than milk which was the main food in the traditional Swazi diet. Wages earned by family members are so low that the deficit in the diet can not be compensated for by the food items purchased. Protein deficiency kills many young children and retards the brain development of many more.

In general, the health of family members seems to have deteriorated in many ways. Diseases which spread through improper hygiene are common since people have been living a sedentary life and the

country has become more densely populated. Water now needs to be purified and waste must be carefully disposed of to prevent the spread of disease. But families lack the resources of time and labor necessary to take care of these needs. Immunization is available, but children are not universally innoculated, partly due to a lack of understanding on the part of the parents and also because modern health establishments are often long distances from the home. A belief in the mystical causation of disease is still very common, with the result that modern facilities are often not utilized for the treatment of disease.

The family is no longer a stable social unit, because family members of today rarely live together and because they must constantly fight the battles of poverty. It is not possible for most families to provide a healthy living for their members, given the inability of the homestead to produce enough food and the poor wages paid to family members employed in work away from the homestead. Values are no longer clearly laid out because society has changed so rapidly and because the family is not a close physical unit. Under these circumstances, family life education is no longer an integral part of family life. A whole myriad of social problems results largely from the social illness which arises from a disjointed family life: more adolescent pregnancy, rising birth rate in the absence of forces to limit child bearing within marriage, increasing incidence of sexually transmitted disease, high rates of alcoholism and more cases of ritual murder.

Chapter VI is a complete analysis of the data which was collected through the interviews conducted in these four schools. The issues explored were those dealt with in the home economics curriculum, with an emphasis on the contemporary problems of Swazi families.

CHAPTER 2

THE RESEARCH PROJECT AND ITS METHODOLOGY

A. Introduction

The purpose of the first chapters has been to put this research project in proper perspective by clearly describing the milieu in which this home economics program is operating. It is crucial to understand that the extent to which the program can be effective is severely limited by political and economic factors which determine how the education system works and which also have a strong influence over the way the family unit functions. I would therefore suggest, at the outset, that the program needs to be evaluated with this in mind; it cannot be expected to effect massive changes in the lives of Swazi families -- if minimal changes are evident, the program has been as successful as one could expect it to be.

The state in Swaziland has, in a unique way, combined the traditional system of authority with a modern system of government to build a powerful mechanism which it uses to further the interests of the ruling class and of foreign capital investment. The state is far more concerned with large scale agricultural and industrial development than it is with providing people with the means to create a healthier, more prosperous lifestyle. In fact, if profits are to continue to fill the coffers of foreign and local capitalists, the traditional mode of production must be maintained so that wages can be kept at the low

level which assures that profits will remain high. This means that any initiatives which would improve the level of living on the homestead would work against the goals of the capitalist class in Swaziland. If wages rise, giving the family more resources and therefore improving life on the homestead, profits will fall. And if the homestead is allowed to become more productive, the need for people to participate in wage work decreases, and industry will find it difficult to hire people at these low wages.

Given the political and economic context, an educational reform of any description will be fighting an uphill battle to effect any significant change in the greater society. Carnoy and Levin suggest that any educational reform which is not part of a broader change in the social, economic and political structure of a society, is not likely to solve problems which arise out of its basic structural features. And this reform in a home economics curriculum is just that--a curricular reform; as Eisner points out, this cannot achieve educational reform on its own (Eisner, Chapter 4). Real achievement of the goal of home economics--improvement of the life of the family--could only be realized if this curricular reform were part of a massive change in government policy toward development at the 'grass-roots' level.

The scale on which the curriculum is taught even further limits its effectiveness. The proportion of young people who are exposed to the contents of this curriculum is a very small percentage of the total number of children of school age. One limiting factor is the

proportion of students of the appropriate age group who attend junior secondary school. Although, as will be indicated in Chapter 3, enrolment in secondary schools has increased dramatically since independence in 1968, no figures indicating the current participation rate are available. However, it can be reasonably speculated that, since there is definitely not full participation at the primary level, and since the common examination at the end of year 7 further reduces enrolment, that junior secondary schools are attended by about half of the population in the appropriate age group.*

Another limiting factor is the number of students attending junior secondary school who study home economics. There are three aspects to this limitation. First, not all secondary schools offer home economics. Although more schools are being equipped with home economics facilities each year, in 1986, 67 out of 100 secondary schools offered this course to students (Personal communication with M Mabuza, Senior Inspector of home economics in Swaziland). Secondly, in most schools, the course is offered only to girls who make up half the student population (Swaziland Annual Statistical Bulletin, p.93). This further limits the numbers of students exposed to the course. And thirdly, not all girls who attend schools that offer home economics take the course. Many schools offer several subjects at the same time and some girls may take an alternative course of

---

* Looking at numbers of candidates for exams at the end of primary school and junior secondary school, we can see that enrolment is reduced by approximately half after primary school. In 1984, there were 12,722 candidates for the Primary Certificate exam and only 5413 candidates for the Junior Certificate exam written at the end of junior secondary school (year 10).

study. So, aside from the limits to the effectiveness of the curriculum imposed by the political, social and economic situation in which the schools function, the limited number of students who take the course further affects the extent to which the course can help to improve the situation in the family.

It would be wrong, however, to deny the significance that education has on the lives of people who experience it. Previous studies done in Swaziland indicate that the level of education of adults in the homestead held a positive correlation with some of the practices with which this study is concerned. Green found that the level of formal education made a statistically significant difference when adult members of the homestead were asked about their sources of pure water and their behavior related to the utilization of pure water, the use of a latrine, and an understanding of the causes of bilharzia (Green, p.23 & 60). Both de Vletter and the National Nutrition Survey found that adults with higher educational levels were less likely to have malnourished children (de Vletter, p.183 and National Nutrition Survey, p.10). Each of these studies examined the level of general education attained by members of the homestead; they did not examine the type of education which would be specifically directed toward improving life on the homestead. Most students taking home economics at this level are from rural areas; many of them will not go on to further education, nor will they be able to find employment.* They are the future rural mothers who will have

* In 1984, there were 5413 candidates for the common exam written at the end of junior secondary school (Junior Certificate) and only 2389 candidates for

significant influence over the families of which they will be a part. This study is based on the assumption that, despite all of the barriers which inhibit the success of this home economics program, it can be a force to improve the lives of the families of people exposed to it.

This chapter will describe the purpose of the research by outlining the problem which serves as its focus and explaining the questions which it seeks to answer. The home economics program which is being evaluated will then be described. Following this description, the data needed to explore the issues in question will be identified, and the methodology used to gather this data will be described. Finally, the way in which the research project was conducted will be explained.

B. The Purpose of the Research

This research project was undertaken in an attempt to discover whether this home economics curriculum was contributing to the development of the country at a very basic level--the level of the family. Thus, 'development' is the problem, but the conceptualization of the term 'development' employed in this study is not the common one. I take issue with those who use figures of Gross Domestic

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the Cambridge Ordinary Level exam written at the end of high school (Swaziland Annual Statistical Bulletin, p.99). This gives some indication of the numbers of students who are not able, for one reason or another, to continue their education into high school. No figures are available for rates of unemployment, but it is very high.

Product (GDP) and speak of industrial and large commercial agricultural enterprises as indicators of how well a country is 'developing'. Closer examination of the life of people in countries which are said to be 'developing' at a good pace often indicates that poverty remains endemic, malnutrition and poor health remain serious problems, and, in fact, that life has improved for only a small percentage of people in those countries.* Foreign corporations which take most of their profits out of the country in which they invest will raise the levels of GDP and produce these indicators of 'development', but the country is not necessarily developing.

Real indicators of development should show an improvement in the lives of the masses. Figures that show a drop in the infant and child mortality rates, a drop in the rates of malnutrition among children, a decrease in the numbers of diseases spread through unclean water--these would indicate that a country is developing in *real* terms. Figures that show an increase in peasant food production or an increase in real wages of the working class would indicate that families were becoming better able to provide for their needs and would be more accurate indicators of development. Increased availability and usage of health care would likewise indicate that development is taking place. This is the concept of development which provides the focus for this study.

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* In his article on Taiwan, South Korea, Hong Kong and Singapore--the newly Industrializing Countries (NICs)--Browett points out that " . . . the impressive growth rates in the NICs have been accompanied by not only political repression and violence, but also by growing unemployment, poverty and inequality" (Browett, p.795).

In fact, if Swaziland is examined in terms of its expansion in the sectors of industry, commercial agriculture and mining, and if one were using these as indicators of development, one could safely say the country is progressing or 'developing'. Huge sugar plantations, large afforestation projects, plantations of cotton as well as citrus fruit and pineapple can be seen in certain areas of the country. Coal, asbestos and iron ore mining enterprises have been very successful in Swaziland. The industrial sector also boasts a large commercial bakery, large breweries, canning factories, a zipper factory, a television assembly plant and several other enterprises that could only be called 'successful.' But hundreds of children die every year because of the diseases caused by poverty. Homesteads cannot produce enough food for family members and income earned cannot buy families the things they need to survive in the modern world.

This research attempts to discover whether the home economics program has been effective in helping to promote the kind of development which was earlier defined. The answer to this question lies in attitude and behavior change among students who have taken the course. Thus an attempt will be made to discover whether such changes have taken place. The research will also seek to discover whether the teachers are able to make use of this program to develop these desired attitudes among the students. And finally, the project will search for indicators of whether any changes in attitude have caused behavior changes or are likely to produce behavior changes in the future.

The study is based on the assumption that if persons experience a change in attitude, they will be more likely to change their related behavior than those who had not experienced an attitude change, even though, as Deutcher points out, there is not a direct correlation between attitude change and behavior change (Deutcher, p.243). We are, after all, dealing with human beings who are bombarded with a myriad of different influences on their behavior, and who often do not act in accordance with their beliefs. Within the Swazi family there are certain barriers which exist to prevent behavior changes in the context of practices which are being examined in this study. Some of those barriers are outlined in Chapter 4--the sheer lack of resources to be able to acquire clean water and healthy food, which, in many families, would prevent even the best informed person from being able to provide healthy sustenance for family members. Other barriers are erected by the traditional system of authority which remains a powerful force in many families. The hierarchy which gives the mother-in-law and then the male homestead head the decision making powers can make it impossible for a young, well-informed woman to put into practice what she has learned in home economics.

As the educational level of these people who hold the positions of power within the families improves, they become less bound to tradition and more open to making positive changes. This research has discovered several cases of families which have already made changes in their practices, due to the influence of a girl who has completed this home economics program. These girls are still very

young, and have not yet (in all cases but one) acquired the status which accrues to them after giving birth to a child. They are, in fact, very low in the family status hierarchy, but they have still been able to institute behavioral changes within their families. While one cannot assume that each girl interviewed -- and who expressed an attitude which differed from the young girls just starting the program -- would, in future, change her behavior, it is reasonable to assume that as these girls grow older and acquire more status and authority in their respective families, they will become more able to change their behavior and the behavior of other family members.

More specifically, the attitudes and behaviors which will be investigated are those which may lead to a better quality of life for the family. Here, no attempt is made to look exclusively for indicators of a 'modern' person as Alex Inkeles has done on a large scale. Some of the indicators he used are related to this study -- for example, being open to new experiences, increasing independence from traditional authority and a belief in science and not fatalism -- but these will be dealt with in an indirect manner. The remainder of the indicators used by Inkeles play no part in this investigation; i.e., attitudes and beliefs such as ambition for self and children to achieve high occupational and educational goals, an affinity for punctuality and planning, a strong and active interest in politics and an interest in current news (Inkeles, p.10). I would contend that the aspects of the 'modern' person as formulated by Inkeles are not crucial to the improvement of the life of families in developing countries.

The girls who take this course will likely be managing the provision of food and clothing for their families and will be taking care of most aspects of health and hygiene. The study will investigate whether these girls are developing attitudes which will help them to perform these tasks in an efficient manner. In general, the issues which will be explored are as follows:

Has the respondent learned how to use available resources of time, physical labor/energy and money most efficiently?
Does the respondent know how to provide a family with adequate nutrition, using minimal resources?
Does the respondent have knowledge of proper food preparation techniques which conserve nutrients?
Does the respondent know how to provide a family with adequate clothing?
Is the respondent able to participate in the market economy in a way most beneficial to the family?
Does the respondent possess knowledge of sanitation and hygienic practices?
Does the respondent hold attitudes toward the use of medical facilities which will most benefit the family?

C. The Home Economics Program

The first formal home economics curriculum in Swaziland, like the curricula in most subject areas, was British. Formulated for British

students, it presented cookery and needlework in the framework of a European lifestyle. Although this curriculum was as 'irrelevant' to the student as were the academic subjects offered, the nature of home economics is such that it is more intimately connected with a specific way of life than are other subjects. By teaching students to use strange foods, prepared in a strange way and teaching them to clothe themselves in a way to which they were not accustomed, home economics in its early years was helping to impose the British way of life on young Swazi girls -- at the same time denigrating their traditional lifestyle. While the curriculum may not have criticized tradition in a direct manner, the absence of traditional practices from the curriculum was itself a strong statement.

By promoting the use of certain foods and material for the construction of clothing, the curriculum was helping to entice the Swazi to participate in the market economy. The dishes prepared in class did not make use of wild fruits and vegetables; they required new foods like carrots and oranges which needed to be purchased. Rather than using maize, the cereal which was available locally, these classes would most often use wheat flour, a product which had to be purchased and was expensive since it had to be imported. If milk was used, it was not in its soured form, to which the Swazis were accustomed, but it would be fresh milk or cheese. Without means of refrigeration, milk did not stay fresh, and cheese was not a traditional method of preserving milk. Often dishes containing meat would be prepared in class -- meat that would have to be purchased, which meant that these dishes could rarely be prepared at home.

Woven and knitted cloth was not traditionally used for clothing and since the Swazis were not acquainted with the crafts of fabric construction, these too would have to be purchased. And the expenses did not end here; a sewing machine would be needed for clothing construction, and kitchen equipment was necessary to prepare food.

When the young Swazi woman needed direction on how to adjust to the changes in her family lifestyle, she was instead made to realize that the things she was doing and the materials she was using in her home were not even mentioned. When she needed practical information on how to increase the protein content of her family's diet, she was instructed in methods of cooking things she could not afford. When she needed to learn how to use the resources available to her, she was being convinced that she must find ways to acquire the things that were beyond her reach.

There have gradually been changes made to the home economics program, both to the curriculum itself and in the numbers of students who come in contact with the course. In the early years of formal home economics instruction, with only small numbers of students in schools, very few girls were able to take the course. During the decade following independence, as schools were being built and national enrolment was increasing dramatically, more students were enrolled in home economics courses.

Some changes were made to the curriculum, in an attempt to make it more appropriate for the learners. Discussion about practical use of some local foods, maize in particular, was incorporated into the junior secondary course. At some point during the year, students would prepare food in the traditional manner, using an open fire. But, the curriculum remained very European in its orientation. Most often food was prepared in a modern kitchen, using modern equipment and served in the western manner. Instruction in needlework reinforced the view that the European style of dress was most acceptable. Students were being prepared to become consumers in the changing economy. There was no mention of the changes which families had been forced through in recent years, no mention of health and hygiene which had become areas of concern, and not enough emphasis was placed on nutrition and how to arrest the escalating rates of malnutrition. Swazi society had changed to a certain extent; although still a rural population, some people were living in towns and some aspects of the modern way of life had even penetrated the rural areas. But, most families still survived on homestead-based agricultural production and the varying amounts of income generated mainly through the wages earned by some family members. Previous chapters have explained all of the problems that prevented families from living in a healthy environment. Home economics was not doing all it could to assist these people.

The curriculum reform implemented in 1983 involved two major changes. The two subjects (Domestic Science and Needlework) were combined as one subject (home economics), and some new topics

were added (see Table 1). It was held that home economics was a broad subject, by definition, and in order to improve daily life, it should not be separated into two subjects. There was a concern that since most students did not go beyond junior secondary school, home economics should give students a good general understanding of the important aspects of family life. It was mentioned that by integrating the two courses, and by reducing the number of classes required by half, that school headmasters might be more willing to take on the subject (Home Economics Panel Meeting, March 12, 1976).

Some minor changes were made to existing topics, but the major change in content involved the addition of two sections: health and hygiene, and family living. Clothing and textiles remained very much the same, except that traditional clothing was now being mentioned and students were taught the crafts of knitting and crochet. Changes to the foods and nutrition section were minor: discussion of fruits and vegetables was to include mention of wild varieties, discussion of protein sources was to include locusts and caterpillars (traditionally consumed), and maize was to be stressed as the staple food. The section on child care remained the same except for an added discussion on the spacing of children in relation to the health of the mother and the children.

The section on health and hygiene included several topics which had not been covered previously. Instruction was provided in first aid treatment of common injuries in the home. A section on personal

hygiene included care of the skin and teeth as well as personal cleanliness during menstruation. Use of modern health services was included, and the common diseases of the region were to be discussed along with the means for their prevention.

The new section on family living was quite extensive. Types of families included the nuclear and the extended family. The process of growing up and selecting a mate were included, followed by a discussion of the different types of marriage contracts--traditional and civil marriage. The family size was to be discussed in relation to resources available. Decision making in the family was added, along with discussion of the roles and responsibilities of family members. The way in which changing society affects family life was also included. Under a topic of home management, choice of furniture and equipment for the home was to be discussed along with banking, budgeting and use of credit.

Table 1

Topics Covered in Junior Certificate Home Economics

Nutrition

Function and sources of nutrients: protein, carbohydrates, fats, vitamins (A, thiamin, riboflavin, niacin, C and D), minerals (calcium, phosphorus, iron, iodine), water.
Effect of heat on nutrients.
Deficiency diseases and their prevention.
Basic food groups and planning a balanced diet.
Daily requirements for various population groups.
Digestion of food.

Nutritive value of milk, fish, meat, vegetables, fruits, maize, eggs, relishes (stews eaten with maize), beverages.
*Ways of improving the diet from traditional foods.
*Foods for special occasions.

Food Preparation

Food hygiene and handling.
Care and cleaning of kitchen equipment.
Kitchen weights and measures.
Methods of cooking: boiling, stewing, steaming, grilling, shallow frying, deep fat frying, roasting.
Cooking methods for milk, fish, meat.
Preparation of flour mixtures - cakes, biscuits (cookies), pastry, bread.
Preparation of salads, beverages, sauces, snacks.
Setting tables.
Preservation of food.
Causes and prevention of food spoilage.

General Foods

Selection of vegetables and fruits, *including wild fruits and vegetables.
Cereal grains: maize, sorghum, rice, wheat, oats.
Protein foods: eggs (in detail), *locusts, *caterpillars, meat (including wild), milk, legumes.

Health and Hygiene

*Safety in the home.
*First aid for cuts, burns, bites, nose-bleeding, drowning and fainting.
*Care of skin and teeth.
*Personal cleanliness during menstruation and proper disposal of sanitary protection.
*Importance of latrines and bathing facilities.
*Use of modern health facilities.
*Common diseases and their prevention.

Family Living

*Types of families.
*Roles and responsibilities of family members.

*Banking and budgeting, buying on credit.
*Growing up and mate selection.
*How changing society affects families.
*Marriage contracts and marital problems.
*Family size in relation to family resources.
*Decision making in the family.

Child Care

*Menstruation and conception.
*Needs of the pregnant woman--emotional, nutritional, physical.
Preparation for baby's arrival.
Breast-feeding and artificial feeding.
Bathing of baby.
Weaning foods.
Prevention of childhood diseases: immunization.
Child development pre-school.
Care of baby's clothing.
Making toys for child.
*Spacing of children in relation to health of mother and children.

Clothing and Textiles

Textiles: basic manufacture of fabrics, types of fibers. Properties of common fabrics.
Use and care of sewing equipment.
Stitches: permanent, temporary, embroidery.
Seams: french, fell.
Seam finishes.
Disposal of fullness: gathers, pleats, tucks, darts.
Hems.
Pockets: patch pockets, set in pockets.
Continuous wrap opening.
Cross-way (bias) strips and their uses.
Setting in sleeves.
Collars: flat and rolled.
Openings and fasteners.
Styles for different figure types.

Patterns

How to use commercial patterns.
Estimation of amount of fabric required.

Layout and cutting of garments.
Fitting.
Adaptations of patterns and alterations.
Taking measurements and pattern drafting.

Handicrafts

*Knitting: knit, purl, increase, decrease, cast on and cast off.
*Crocheting.
*Beadwork.

Mending

Patching, darning, *renovation of household garments.

Laundry

Laundry equipment.
Hard and soft water.
Soaps and detergents.
Care of white cotton, wool.
Removal of common stains.
Stiffening agents.
Pressing.
Labels on clothing.

* topics which have been added to new curriculum

Ministry guidelines for the previous courses of Domestic Science and Needlework had suggested that each course be given five blocks of forty-five minutes each per week. The new home economics course was given six blocks of equal length. There was some speculation about the difficulty of teaching this new course in the time specified, a course which was in fact a combination of two courses with new topics added (Home Economics Panel Meeting, March 2, 1978).

The projected date of implementation was February, 1979 (the beginning of the school year) (Home Economics Panel Meeting, September 12-13, 1978), but circumstances did not allow this to occur until 1983. The first problem appeared when the body which is responsible for the common exams (the Exams Council) did not approve the new curriculum since it required more details on how the exams would be conducted (Home Economics Panel Meeting, May 22, 1980). Approval by the Exams Council was further delayed due to the death of the Senior Inspector of home economics, who was responsible for dealing with this matter. The curriculum was implemented nation-wide in Swaziland in March of 1983, one month after the commencement of school for that year.

D. The Methodology and the Research

The epistemological foundation which determined the methodology of this research--naturalism-- provided the most effective means of acquiring the relevant data. While it must be acknowledged that scientific research in social settings, guided by a positivist approach, is the most effective means of gathering objective data, it is "weak and wasteful for the collection of subjective, attitudinal data" (van den Berghe, p.31). Data which deal with attitudes are highly subjective in nature and highly complex. Naturalistic research, by not restricting itself to the predetermination of variables and the relationships between those variables, denies that the social world can be defined in such a one-dimensional manner as positivist

methodologies afford. This kind of research is open to searching out and discovering the complex patterns which occur in nature (Guba, p.75).

It is naive to assume that one can discover what a person's attitude is toward any given topic, by asking that person a predetermined question. There are endless possibilities of the respondent not understanding the question, giving a false answer to the question for any number of reasons, or not being able to fully answer the question. If the researcher and the respondent are face to face and are given the opportunity to explore attitudes in an unrestricted manner, the chances of accurate information being presented are far better. The researcher is likely to realize whether the question is unintelligible to the respondent, and has the opportunity to rephrase it. Non-verbal cues or a hesitation to answer often indicate this lack of understanding and such cues might indicate that the researcher that the respondent is not answering truthfully. There are no limits to the ways in which the respondent must answer, nor to the amount of time which may be spent in explanation of the answer.

In a cross-cultural situation such as this one, as van den Berghe points out, subjective data are even less accessible to survey methodology (van den Berghe, p.32). The chances of misunderstanding a question due to the respondent's native tongue being Siswati and not English, are significant, even though they have

been schooled in English.* In addition, the phrasing of a question may express an idea outside of the cultural context of the respondent, inhibiting the ability to answer it correctly. It is therefore necessary for the researcher to be physically present in order to detect any misunderstandings which are due to this unfamiliarity with the language or the cultural context. Since I am well acquainted with the Swazi culture, having lived in a rural area of the country for three years, I believe that I was able to detect such misunderstandings. I was also able to interpret the answers given by respondents, because of my familiarity with common nuances of expression.

In recent decades there has been an upsurge of positivist ('scientific') research in the social sciences and in education. This type of research attempts to explain and predict in its search for hypothesized regularities; it treats the social world as though it functioned the same way as the natural world (Burrell, p.2 & p.5). Scientific research became immensely popular because it was very appealing that humans could possess the ability to predict their own behavior, and this kind of scientific dialogue acquired the legitimacy that it still maintains (Apple, 1978, p.383). It has, however, become more and more clear that human beings do not behave as rationally as do the cells in the body. Many scholars have attempted to defuse the enthusiasm toward scientific research with very convincing

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* Since Siswati is the language spoken by all Swazis, they are not forced to use English to communicate with each other. Therefore, even though English is the medium of instruction, many students are not fluent in this language.

arguments. Eisner believes that research carried out in this way is inadequate for educational enquiry and that we need ways of acquiring deeper levels of meaning (Eisner, Chapter 8). Michael Apple criticizes scientific research as inappropriate for the complexity of curriculum research (Apple, 1979, p.109). Yet, the results of scientific studies continue to be well respected.

This research was conducted with the belief that setting out relevant variables in advance would have restricted the research, possibly to the point of rendering it meaningless. Discovery of relevant concerns and issues were only partially set out in advance because it was not possible to have anticipated all that were relevant to the study. Extraneous elements did prove themselves to be crucial to providing the whole picture; I was prepared from the outset to look for these unanticipated perceptions (Owens, p.12 & Guba, p.17). I was open to exploring the meaning that each issue which was raised had for the audiences concerned. My general interest was to explore and discover the effects of this curriculum, not to limit myself by laying out in advance what I thought the effects were. Even though I had an intimate knowledge of the curriculum and the culture, this would have prevented my discovery of some important issues. My stance was expansionist rather than reductionist (Guba, p.70).

In keeping with the view that unanticipated effects are crucial, I did not specify in advance what the original objectives of the course were. Objectives were not set out in a comprehensive manner for this curriculum, but I could have outlined the implicit objectives

using my personal experience with the curriculum and from consultation with others involved in teaching it. But, my intention was to evaluate the quality of the curricular experience, and not simply to assess achievement in terms of comparing input and output. This manner of measuring achievement of objectives overlooks the type of achievement that cannot be measured because the relevant objectives were unspecified (Eisner, p.35-36).

Procedures Used in the Research

In order for the implementation of a curriculum to be effective, it should be evaluated. Although the initiative for the evaluation was my own, the research was funded through a scholarship from the Canadian International Development Agency (CIDA) and the Ministry of Education in Swaziland; in particular, the home economics Inspectorate supported the research in every way that they could. Thus, the Ministry was aware of the need for the research to be undertaken, although they did not specifically request that it be done. People in the Ministry were very cooperative in providing me with information I needed and giving me access to the schools. Apart from following the guidelines indicated in my original proposal to CIDA, there were no restrictions placed on my research.

Students and teachers from four different schools were interviewed. These particular schools were selected in an attempt to establish contact with students from different areas; each school was located

in one of the four regions of Swaziland. In addition to this, two of the schools were located in towns and the other two were rural schools which served their surrounding areas and also had boarding facilities. There tends to be a natural homogenization of students from different backgrounds in the schools in any case; in the town schools, one would find many students from rural areas who were staying with friends or relatives while attending school, and students from towns often attend rural schools, staying in homesteads near the school or in the hostels. School A was located in a rural area in the southern region, school B was in a town in the north-west area of the country, school C was in the central region in a major town and school D was in a rural area in the east of the country.

Letters were written to the headmasters and department heads of home economics in each school; the letters were signed by Mrs. M. Mabuza, Senior Inspector of home economics and sent by the Ministry of Education. The letter explained who I was, and it explained the research project in general terms. Assurances were made that respondents would remain anonymous and that it was the curriculum in general which was being evaluated, not the school or the teachers. The schools were informed of the time period during which I would be visiting and were requested to select students to be interviewed at this time. Students from a variety of different backgrounds and ability levels were desired, and since the teachers of these students would be familiar with the students' backgrounds, they were requested to make the selection. The letter included a request that not more than three interviews be scheduled per day,

that two hours be available with each respondent, and that a room be made available for my use during these interviews. All home economics teachers in the school, as well as the headmaster, were requested to take part in an interview.

Schools were requested to select three students in form I who were just beginning the program and three students who had completed the program. Changes in attitudes and behavior were assessed on the basis of a comparison between these two groups. Ideally, the same students from form I should have been interviewed upon completion of the program in order to assess changes in the individuals, but the available resources of time and money did not allow this. I believe that this compromise did not seriously affect the results, given the numbers of students who were involved in the research and the common patterns of responses which emerged.

As the interviews progressed, certain factors changed the numbers of students who were actually interviewed. Three form I students were interviewed from each school except school D, where only two interviews took place. One of the students in form I turned out to have completed form III at another school and was repeating her entire junior secondary program. I completed her interview but put her into the category of those who had completed the program. The student who was chosen to replace her did not appear at the appointed time, and since it was the end of the week and I was scheduled to arrive at another school the following Monday, I could not have rescheduled the interview. All of the students who had

completed the program, with the exception of two, were attending form IV at the respective schools. It was too difficult for teachers to contact respondents who had completed the program and were no longer attending school since in most cases they had moved away from the vicinity. The major advantage of including respondents who were no longer attending school was that they would likely be at home and would, more likely than those still attending school, be putting what they had learned into practice. However, most girls at this age take on considerable responsibilities around the home and are therefore just as likely to be acting on any change in attitude that might have occurred among them. I decided, after completing the interviews at the first school, that I wanted to broaden the sample from this group by interviewing four respondents from each school. In one instance I discovered that the respondent had actually studied her junior secondary home economics at another school, so I interviewed one more student from this school. In the end I had interviewed a total of 16 respondents who had completed the program: 3 from school A, 4 from school B, 3 from school C, 4 from school D, and 1 each from two other schools. Two teachers were interviewed from each school, except school C where 3 teachers were available for interview. The headmaster of each school took part in an interview. The final tally of interviews was as follows: 11 respondents from form 1, 16 respondents who had completed the course, 9 teachers and 4 headmasters.

Upon arrival at each school I organized my own interview schedule, since in none of the schools had this been done for me. It was often

carried out on a day-to-day basis which worked out well. Each school provided me with a private room of some sort to use for conducting the interviews. This was either a classroom, an office, a library or the quarters in which I was staying while at the school. In all cases the venues were completely private, situated in places where nobody could overhear the conversation.

I had indicated to headmasters before arriving at the schools that if they felt students should not be removed from class for the period of the interview, that I would see students after school and on weekends. In only one school was I allowed to see students during the school day. Meeting with students after school was somewhat of a problem, since most of them lived long distances from school and had to either walk or catch a bus. In some situations I offered them a ride home so that they would not be overly inconvenienced. Seeing students on weekends involved the same problem of travelling, but many were willing to come in any case. In the schools which had boarding facilities, I could see students in the afternoons and evenings during their scheduled study periods. I met with teachers and headmasters during the school days when they had free time.

When meetings with a respondent began, I took several steps to make them feel comfortable. I would begin by introducing myself and explaining what the research project was about. I would then assure the respondent that any information given to me would remain completely confidential--that in no situation would a comment be linked to the respondent and in fact their names would

not appear anywhere in my report. I also assured each one that I would not verbally carry this information to anyone. I thanked them for taking part in the study and explained that the goal of the research was to create a better home economics program and that their participation would help this to come about. I encouraged them to be honest in pointing out both positive and negative aspects of their experience. I was very pleased with the manner in which the students, in particular, conducted themselves in the interviews. They appeared, in almost all cases, relaxed and willing to speak freely to me.

I recorded the interviews by taking notes of the verbal responses of each respondent as well as their non-verbal expression. I held the note pad away from view of the respondent, so that they would be minimally distracted by what I was writing and would not be able to glance at what I had written. I learned during the first interview that this was important. These notes were then transcribed into a more complete form as soon as possible after the interview was completed. In most cases, this was done the same day or the following day, during the times when I was not interviewing. I recorded in this way for two reasons. Firstly, I felt the reaction of respondents to a mechanical audio-recording device may make them slightly nervous and affect the quality of the responses they would give. This was particularly a concern with the students, for whom I wanted to create the most relaxed environment that I could. And secondly, the schedule I was working with did not allow me the time to transcribe a word-for-word audio-recording immediately after the

interview. I felt it was important to include my own observations of non-verbal expression and in order to coordinate these notes with the audio-recording, the transcribing would have to be done very soon after the interview in order to produce an accurate description of what had taken place.

The format of the interviews was not highly structured. I took in a list of questions to be asked, but did not follow these in order and was open to exploring in new directions if it appeared to be beneficial to the research. In this way I often discovered important avenues to be followed up in subsequent interviews, and the skeleton of questions I used as a guide was thus changing as I went along, particularly in the beginning stages. I would also stop to discuss something not relevant to the research, simply because the conversation led itself that way. This helped to make the interview less formal and seem more like casual conversation. While in most cases I would get a simple response, I would often sense that there was more the respondent had to say on the issue, in which case I would pursue it further. I could rephrase questions if they were not understood or ask for clarification of an unclear response. Often a respondent would speak at length in response to a question, with no prompting from me. The interview would lead itself from one topic to another in the natural course of the conversation. Teachers and headmasters needed little prompting; I often would just ask one leading question and they would give me a complete answer. They would often lead themselves into additional topics.

The interviews were all conducted in English. English and Siswati are the official languages of Swaziland and students begin studying in English during primary school. Students who had completed the program, as well as teachers and headmasters, were fluent in English and there were few problems of communication. The form I students varied considerably in their competence with English, and I would often have to spend some time clarifying what I wanted to say or try to clarify what their responses were. I had three years' experience teaching students from this level and I feel I was able to communicate with them effectively, even if somewhat slowly.

The issues explored during the interviews were determined by the topics covered in the curriculum, with an emphasis placed on those topics which were most closely related to the problems which the families were currently experiencing. Reading of previous research by Jones, de Vletter and Green, which formed the basis for the discussion of the family in Chapter 4, provided the focus for this emphasis. Students' attitudes on all topics were explored, as well as their behavior related to these topics. The students who had completed the program were questioned mainly about attitudes and practices that they had changed. In fact, when asked about what they had changed in their lives after taking the home economics course, this often started off the interview and carried us through many of the topics. Teachers were asked about the curriculum and how it was helping them to make these changes in students. Headmasters were questioned on home economics as it related to

their job as administrators. The details of topics explored will become clear in the data analysis section.

Internal Validity

Validity as a general term refers to how accurate the measurement is; a valid piece of research will accurately describe what actually takes place in human life. Internal validity demands that the researchers observe or measure what they think they are observing or measuring (Lecompte, p.43). Naturalistic research is particularly well suited to achieving this level of accuracy, when the inquiry focuses on human attitudes and behavior. Validity is strived for ". . . through personalized, intimate understandings of phenomena stressing 'close-in' observations to achieve factual, reliable, confirmable data" (Owens, p.10). This level of understanding is achieved through the close contact between researcher and respondent. During the process of this interaction, the researcher has the opportunity, "with a perceptive eye and an informal mind", to realize the significance of the muted messages expressed through action and speech (Eisner, p.197). Given the complexity of the human being, naturalistic research is ideally suited to reaching this level of understanding. Scientific research is dangerously susceptible to distortion by leaving out issues important to the research (Eisner, p.196). In fact, the adoption of the scientific model in the social sciences "has resulted in an uncommon concern for methodological

problems centering on issues of reliability and to the concomitant neglect of problems of validity" (Deutcher, p.241).

Triangulation, i.e., using as many data sources as are available, can enhance the credibility of any research (Owens, p.15 & Guba, p.107). Although the major source of data in this research was the interview, my years spent teaching and living in the country have contributed immensely to my understanding of the situation. While I was not formally conducting research during that time, in an informal sense I was a participant observer. Length of time spent on site 'learning the language' enhances the credibility of any research project. "In short, time is essential to permit the researcher to shift from predispositions, through early impressions, to a deeper level of understanding" (Owens, p.14).

Historical effects, or changes in the overall social scene, and changes due to maturation can alter the validity of research. Changes in attitude and behavior which were explored in this research, may have been caused by influences in the society or in the family. I discovered many of these factors by asking students where they learned a particular concept, or why they had made a change. The social scene had not changed to such an extent that attitudes toward the family or practices of the family would have been affected. The only substantial impulse from outside the school was a large scale radio campaign to educate the public on oral-rehydration therapy for children with diarrhea. Other than this, the way of life and

government programs related to health and nutrition remained very much the same.

It cannot be denied, however, that some of these changes may have occurred in the individual even if they had not experienced home economics. In order to more carefully analyze whether this was true, a sample of students from both form I and post-form III groups who had not studied home economics could have been interviewed and the results compared with those who had. This was not possible given the time and finances available with which to conduct the study. However, I made every attempt to discover the reasons for changes which had taken place. Questions were often phrased in a way that they requested information from the students about what they had changed in their lives after learning experiences in the home economics course. In some cases I discovered another influence for a change, such as an older sibling or a parent, but the home economics learning experience would often reinforce the change in these cases. So, although the home economics program could not always take full credit for producing the change, its positive influence cannot be denied.

External Validity

External validity refers to whether research findings are applicable across groups (Lecompte, p.43). In the case of this study, where the national curriculum is under evaluation, it is quite important that the

findings be applicable across the country. Given that the country is very small, consists of only one African tribe and that lifestyle within the tribe tends to be uniform, the cultural background of respondents would be similar. And although there was not a specific attempt to acquire a 'random sample', the population of schools tends to be naturally random since students often travel long distances to attend school. The only real distinction would arise from different levels of affluence; those who could afford a good lifestyle would not be subject to health problems arising from a lack of proper hygiene or nutrition. Most of the country does not have access to this kind of lifestyle and most students interviewed came from the type of homes which were typical of the average Swazi home. It was important, however, to use several different schools in the study since there could have been some difference in the way in which the program was carried out. Toward the end of the study I found the information coming in was very similar to what I had already acquired. I believe that I interviewed enough people to get a good cross-section to view how the curriculum was affecting those who had experienced it.

Reliability

This criterion of rigor refers to the degree to which other researchers would produce similar results (Lecompte, p.32). This is a rather complex issue, especially in the case of naturalistic research, given the open-ended way in which the research progresses and the

complex nature of reality. In the case of scientific research, reliability is not difficult to achieve since variables and methods are laid out in such a precise manner. However, in the previous discussion of internal validity, the danger of scientific research painting an unrealistic picture of human attitude and behavior is significant. In this case, the research could be easily replicable by other researchers, but the same inaccurate picture would simply be painted over and over again. I suggest that this criterion of rigor then becomes a pointless one.

Indeed, as one researcher is bound to have a different background and therefore look at any situation differently from any other researcher, the chances of two people producing identical results are almost nil. Guba and Lincoln suggest that the differences between the findings of two researchers may be more interesting than their similarities (Guba, p.120). Elliot Eisner, an advocate of the 'artistic' approach believes that the requirement that a study be replicable by another researcher should not apply to naturalistic research. He makes his point using the following analogy:

> While one might question a writer's or a film producer's reliability, there is no formalized set of procedures to measure writer reliability; one doesn't really want the mean view of four writer's observations about the mental hospital in Oregon which served as the subject matter for Ken Kesey's play, one simply wants Ken Kesey's view (Eisner, p.191).

Indeed, another researcher going in to do the same study as I have done would likely have a very different background, take a different

approach, and may produce a set of findings which would case a whole new light on the curriculum. Each study would add something to the understanding of the situation.

I am not saying, however, that my study should simply not be questioned and that no other researcher should attempt to complete a similar study. Should others want to do so, they should be given a clear enough description of the way in which this study was conducted, that they could go in and try to go through the same process. Guba and Lincoln emphasize this point by saying that "[w]e are quite convinced that consistency is a reasonable criterion for any inquiry. But we reject the concept of reliability as that term has come to be used in the scientific paradigm and propose instead the concept of 'auditability' as more appropriate to the naturalistic approach (Guba, p.123). I have attempted, in this thesis, to give a careful account of how the study was carried out.

E. Conclusion

This is the first research project which has examined home economics in Swaziland. While it is crucial to draw some conclusions on the effectiveness of the new home economics curriculum, a major task of this study was to evaluate the program in a much more general sense. Since the curriculum was obviously not suited to its clientele in the early years of home economics in Swaziland, it is essential to discover whether the changes made over the years have

produced a curriculum which is effectively dealing with the needs of the Swazi people. The analysis of data collected should shed some light on whether or not this is the case.

CHAPTER 3
POLITICAL ECONOMY OF SWAZILAND

A. Introduction

Life for the average Swazi is one of poverty. The arduous, everyday tasks of living that can completely fill the waking hours would take their toll on a strong and healthy person. But a life of poverty does not provide the average Swazi with enough strength and health to cope with many of the conditions faced in daily living. Most Swazi families do not have access to clean water and do not get enough nutritious food. Diseases of malnutrition and diseases carried by unsanitary water are a fact of life in these families. Many are caught in a vicious circle of trying to improve their level of living, but do not have the resources to permit them to do so. Poverty for certain sectors of society in Swaziland has increased as the country became part of the world capitalist economic system. To say the country is "underdeveloped" is to use a misnomer; all evidence indicates that these Africans were more healthy, and were part of a more cohesive society, before relations were established with the western world. A discussion of education in this society must be preceded by an analysis of the larger politico-economic climate in which it exists. This chapter will undertake to present this analysis.

The Swazi economy functions as a part of the world capitalist system, but is dependent on foreign capital--South African capital in

particular. Swaziland has proven to be rich in natural resources, a fact which the British did not recognize until the early decades of this century. The British were initially reluctant to become involved in the region, but after the resources were discovered, they invested heavily in mining and commercial forestry and agriculture. Capital from other foreign countries has since moved into Swaziland, but none as heavily as that from South Africa, the regional economic power. The strong capitalist sector that has been developed by this foreign investment has benefitted only a small number of people inside the country. Most of the profits are transferred to the hands of multi-national corporations. This leaves Swaziland in a situation common to developing countries within the capitalist orbit; it has been forced into debt and dependency on aid while it produces substantial profits for foreign firms.

The policies by which Swaziland plans to bring about its "development" are based on *modernization theory* . This theory, which emerged out of U.S. foreign policy of the 1950s, assumed that the "modern" nations of the world possessed qualities which, if emulated by "developing" countries, would help them become modern and therefore economically developed (Fägerlind and Saha, p.15 and Williamson, p.40). In spite of evidence which casts doubts about the validity of this theory (Fägerlind and Saha, p.16), it remains the premise on which much development policy is based. Swaziland continues to try to *modernize*, but it becomes more dependent as the years go by. Neo-marxist *dependency* theories offer an explanation as to why this is the case, and I will use this

perspective to analyze Swazi political economy as it has evolved through history.*

The state in Swaziland has worked to create a favorable environment in which to accumulate surplus capital for foreign investors. There has been no nationalization of industry or of banking, and profits can be freely transferred out of this country which boasts a cheap and docile labor force (Davies, p.10 and A. Booth, p.92). A very large royal family has maintained its power in a traditional manner and at the same time become a *comprador* class which extracts enough surplus to reproduce itself, and allows the transfer of its resources out of the country on a large scale via multinational corporations. South African capital reaps especially large benefits through its relationship with this Swazi *bureaucratic bourgeoisie*. Swazis work for low wages in South Africa as migrant laborers, and through the common customs union (comprised of South Africa, Botswana, Lesotho and Swaziland) South Africa is given virtually free access to Swaziland's internal markets. Swaziland is without doubt an autocratic state which, to a large extent, denies political and civil liberties to its citizens, and allows continual exploitation of its peasants and workers, thereby maintaining itself and creating a fertile ground in which foreign capital can flourish.

The only way that wages paid to workers inside Swaziland and in South Africa could be kept so low was to make sure that the families

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* For a comprehensive explanation of dependency theory, see Palma, Roxborough, Fägerlind and Saha, and Williamson.

of these workers who remained in the rural areas could continue to work the land and graze cattle. In this way, workers did not have to be paid enough to support their families. In Marxist terminology, wages have been maintained at a level less than was necessary to reproduce the labor force. We see in Swaziland the articulation of the traditional mode of production with the capitalist mode of production, an important aspect of theory first touched on by Lenin and later by Ernesto Laclau (D.Booth, p.768). Lenin departed from Marx's prediction that one mode of production would be completely supplanted by the other in the process of change, when he noted that both had survived in Russia and were interconnected. Laclau observed the same thing happening in Latin America and since his work in the early 1970s, this articulation of the two modes of production has become an important aspect of the debate on development. In Swaziland most workers are actually a semi-proletariat who must rely on homestead production to help support their families. In most cases, income from neither source is enough to live on. The reasons that homestead production is so low and the reasons that workers have not been able to demand better wages are complex and will be explored later in this chapter. One thing will become clear--the state plays a key role in maintaining the status quo.

B. Pre-Independence Swaziland

Before European Contact

When the Dutch East India Company set up a refreshment station on the Cape for sailors travelling between the Netherlands and its Asian colonies during the mid-17th century, the Bantu tribes were slowly migrating south through Africa. Northward expansion of this European settlement would eventually meet up with these African tribes and the encroachment on to African-occupied land by the Europeans was instrumental in producing a massive political reorganization of the tribes (Kuper, 1964, p.8). During the 19th century, the Zulu, the Ndebele, and the Swazi, formed the most powerful centralized states, and developed a strong military machinery for their defense. This was the era of the *Mfecane* , organized raids of neighboring tribes. Economic pressure created by loss of land to the Europeans made it necessary to plunder cattle and other sources of food. Like the Zulu and the Ndebele, the Swazi tribe settled in one area and brought smaller groups of Africans into its political orbit both by conquest and by these groups coming voluntarily to request protection.*

Although it is not necessary to go into details of the specific political organization that evolved in the Swazi tribe, the emotional ties to the monarchy that developed at this time remain strong to this day and

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* For further information on how this occurred in Swaziland see Kuper, 1964, p. 1-9, and Bonner, p.9-26.

one must be aware of them to completely understand the current political climate in Swaziland.£ Stevens explains that

> . . . it was primarily through the leadership of a series of strong kings that the Swazi nation came into existence and has maintained its identity. In addition to being a symbol of national unity, in the minds of the majority of Swazi the king has a direct physical association with the health of his subjects and the fertility of the soil (Stevens, 1963,p.329).

The king's association with health and fertility arose from traditional, spiritual beliefs which are kept very much alive today through the elaborate annual ritual of the *Incwala*, which helps to maintain the legitimacy of the monarchy (A. Booth, p.65).

Authority in the tribe was organized in a hierarchy with the king holding ultimate authority over all of his subjects. The kingdom was divided into chiefdoms, and then into homesteads which were composed of extended family units. The authority of the homestead head, like that of the king, has always been reinforced by his role in the rituals of ancestor worship. Roles of each family member were clearly delineated and the homestead head would use his authority to make sure that each member fulfilled responsibilities and behaved in an appropriate manner.

£ For a more complete picture of the specifics of the political organization of the tribe, see Kuper, 1964, p. 28-36 and Kuper, 1961, chapter 2.

The British and the Boers

During the course of the 19th century, the life of the Swazi became progressively more disrupted, directly and indirectly, by the European settlers. The "carving up" of Africa by European powers led to borders being drawn around Swazi territory, restricting them to a much smaller area than they had originally inhabited, placing many Swazis outside the borders and forcing them to change their nomadic lifestyle to a sedentary one. Conflict with the British had sent the *Boers* * on a massive migration northward during the 1830s, to form the Boer republics which bordered Swaziland on the west and the south. Realizing that Swaziland had excellent winter grazing land, the Boers initiated negotiations with the king for concessions that would permit them use of this land (Kuper, 1964, p.9-10). The Boers had a larger purpose in mind; the annexation of Swazi territory, and Kosi Bay east of it, which would provide them with a route to the eastern coast and enable them to achieve economic independence from the British. The land concessions were only the beginning of a series of concessions of all kinds that would come close to completely taking over all commodities and rights in the country (Halpern, p.98). Mbandzeni, who ruled Swaziland from 1875-1889 (A.Booth, p.11), had no intention of permanently handing over these assets--he only planned to allow temporary use of them (A.Booth, p.99). The Boers, however, managed to get control of

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* Settlers from the Netherlands had cut all ties to their mother country, had adopted southern Africa as their new home, and were henceforth referred to as *Boers* or *Afrikaners*.

railways, telegraph and post communication, and licence and custom authority (A.Booth, p.101).

When Mbandzeni realized that he no longer had control, he approached the British for protection, expecting them to agree to provide it since they had previously helped fight off the Zulus (Kuper, 1947, p.19). The British, however, were attempting to consolidate their empire, and since Swaziland appeared to offer them no economic incentive, they were reluctant to assume responsibility there (Halpern, p.101). The Boers were successful in assuming control of Swaziland in 1894, but they did not hold on to it for very long. When Paul Kruger, president of the Boer republics, invited Bismark's Germany into South-West Africa in 1895 (Halpern, p.106), the British realized that their communication with points further north in the continent would be severed by ". . . a fatal German-Boer axis . . . straight across South Africa" (Halpern, p.106). Control over Swaziland was therefore taken from the Boers just prior to the Boer War of 1899-1902, and as a result of the British victory, Swaziland was formally adopted as a British Protectorate in 1903 (Halpern, p.107).

Following the war, the Swazis tried to regain control of the resources and rights granted to the Europeans by concession. In the Concession Proclamation of 1907, one third of the land was given back to the Swazi and in return many terminable leasehold titles were changed to freehold (Halpern, p.334). The Swazis were outraged at permanently losing two thirds of their land, but their protests were

unsuccessful. Many of them were forced on to reserves, and those that stayed on white-owned farmland were required to pay for their tenancy with six months of labor (Crush, 1985, p.238). Swazis on land occupied by whites would help to boost the commercial agriculture which was struggling to compete with state-supported agriculture in South Africa; those on the reserves would provide wage labor in other sectors of both the Swazi and South African economies.

The newly formed Union of South Africa wanted to incorporate the three High Commission Territories of Botswana, Lesotho and Swaziland, and negotiations with Britain on this issue were not resolved until 1961 (Spence, p.235, and Davies, 1985, p.186).* At this time South Africa gave up trying to incorporate these areas, since it could not agree to Britain's terms (Spence, p.17). Because Britain had reluctantly taken over Swaziland in the first place, and because it assumed South Africa would take control of the country, it put no effort into developing an economic infrastructure until after the second world war (Cobbe, p.441). Since British capital was heavily invested in the South African mining industry and later in mining and agriculture inside Swaziland, the financial benefits of Swaziland becoming a reserve of migrant labor for those mines, was

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* Britain was willing to allow this on the condition that certain native rights were protected. South Africa, at this time, was moving toward legislating a denial of rights to its natives and it became increasingly clear that the intention was to make these High Commission Territories into "homelands," and thereby balance the racial division of land in that country (Davies, 1985, p.186).

undoubtedly another reason for putting off the push for economic development in Swaziland.

A Changed Political Economy

The power of the traditional monarchy could not have become so strong without the personalities of the men in control, but this power could likewise not have been maintained without some European manipulation. As Kuper points out, the power of the king was exaggerated when the Europeans wanted concessions (Kuper,1964, p.40), and during the half century of neglect by the British, Sobhuza II ". . . was encouraged to strengthen his almost feudal powers" (Halpern, p.110). As it became clear that independence was on its way, this strong government was again encouraged, a strategy that would prove very useful to British and South African capital.

King Sobhuza created an environment favorable to foreign capital by maintaining traditional values, by crushing labor disputes inside the country and by maintaining control over the land. The hierarchy of authority which culminated in the king's position had remained strong through the emphasis put on his ritual powers. Loyalty to the traditional rulers was also maintained by their control of the land which ". . . was held by the king 'in trust for the nation'; that is, it was distributed to the people in usufruct only through the chiefs . . ." (A.Booth, p.65). A series of strikes in the 1960s which began in the timber industry and spread to other unions including those of the

miners and teachers, was vigorously suppressed. Government control over labor unrest then continued to ensure wages were kept very low inside the country.

The traditional economy based on hunting and gathering, herding cattle and shifting cultivation had provided a satisfactory livelihood for the population, but after severe natural disasters had ravaged crops and cattle, land taken away, and taxation introduced, it was no longer able to do so. Drought, locusts and cattle diseases hit in the late 17th century, leaving the economy in a weakened state (Levin, p.Vi). When the Boers imposed the first hut taxes in 1895 (Halpern, p.106), a population which had already been forced into labor now had to send even more people to work to pay these taxes. Foreign capital, through the policies of the strong traditional government, was able to maintain this weakened peasant production and thereby avoid the complete proletarianization of the peasants which would make it necessary to pay the workers higher wages.

C. Post-Independence Swaziland

The Political Perspective

The political trends of the pre-independence era which had created conditions for the articulation of traditional with capitalist modes of production, continued to develop after independence. The monarchy maintained its traditional forms of control, and at the same time

adapted itself to take over the modern political machinery. By maintaining control over land and through repressive action against labor unrest, a climate favorable to capital penetration was created. The monarchy acted in a comprador role for foreign capital.

The initial push for independence came not from inside Swaziland, but resulted from the dismantling of British colonial holdings. Britain's attempt to put in place a constitution modelled after her own was unacceptable to the monarchy, which stood to lose power if it were put in place. King Sobhuza II, in reaction to the British constitution of 1964, decided to enter politics by forming his own political party. The King's immense popularity with the peasantry, who had no experience with democratic elections, brought his party 85% of the vote in the 1964 election (Davies, p.9). Sobhuza was installed as king of the new constitutional state and on September 6, 1968, Swaziland was declared independent.

After independence, Sobhuza began to prepare for a new constitution that would give the monarchy almost absolute power. The constitution was suspended in 1973 and from that time until 1978, the king ruled by decree. He justified this action by denouncing the old constitution as bringing in alien political practices which could only disrupt and destroy the traditional way of life (A.Booth, p.74). "These measures . . . succeeded in breaking the opposition and depoliticizing the Swazi masses" (Davies, p.46). The new constitution of 1978 did retain a cabinet of ministers and a parliament but as Davies points out, the Cabinet would implement policies decided

upon elsewhere and parliament would legitimate the decisions of the monarchy (Davies, p.47). Sobhuza, through his own ingenuity, had manipulated the power structures back into his own hands.

Throughout his rule, Sobhuza had emphasized the importance of maintaining traditional values. This was appealing to a population that remained committed to a spiritual religion in which the king played a central role. There was, however, "a strong politico-economic rationale for the king's heavy emphasis on 'traditionalism' throughout his lifetime" (A.Booth, p.65). Swazis were afraid to challenge politically someone who was so important to them spiritually.

This politico-economic rationale becomes clear when one looks closely at the monarchy's relationship with land and labor. In theory, Swazi Nation Land (that portion of land which is not owned privately) is owned communally by the nation, but in fact the traditional ruling class decided who could use it and for what purpose it could be used. The chiefs have been responsible for allocating land to the people in their areas. Subjects must exhibit loyalty to the chief and through him to the king, in order to have use of an adequate amount of land. Allegations of corruption among the chiefs indicate that some make it extremely difficult for people to produce more than a portion of the subsistence for the family (Swazi Times, Feb 27,1987). Although the chiefs as a group are not capitalists, they feel their power over the people disintegrating when some of the subjects are visibly improving their level of living by

increasing production from the land to the point where they are able to sell a surplus. Some chiefs will respond to such activity on the part of their subjects by taking away some or all of the land, or actually moving the homestead. The Swazis are aware of the possibility of this happening. Thus it is a factor in keeping homestead production low. This low production level is functional to capital accumulation, since family production in the non-capitalist mode supplement wages paid in the capitalist mode. Therefore the wage could be less than what would be necessary to reproduce the labor (i.e., support the family).

By maintaining the traditional mode of production, foreign capital was able to pay Swazi workers very low wages whether they worked in Swaziland or in South Africa. Capital operating inside the country was assisted in keeping wages low by the repressive policies of the government. The 1960s was a decade of labor agitation for higher wages and unions organized a series of strikes throughout the country. The traditional government, then through its political party, succeeded in suppressing this activity and squeezed out the one political party which supported the workers (Davies, p.46), because by this time government had strictly controlled labor unions and installed alternative institutions which it controled, to deal with labor problems. With this policy it gained the support of multi-national capital with whom it began to develop a close relationship.

Swaziland has, since independence, maintained close political ties with neighboring South Africa. The country has gone so far as to

violate the SADCC (Southern Africa Development Coordination Conference) agreement with eight other countries in the region who have formulated a plan whereby these countries could become less dependent on South Africa.* In 1979, the same year that SADCC was formed, South Africa proposed a 'Constellation of States' program to counter their efforts (A.Booth, p.113). While officially a member of the SADCC group, Swaziland has in fact contravened its policies, and cooperated with those of South Africa.

Although the government holds the tools to control its people, it would not be correct to say that all segments of the population have been quiescent and accepted all of these measures imposed on them. The industrial workforce, for the most part, has remained docile since their union activity was halted in the 1960s, but students and teachers have periodically engaged in active protest. A wage grievance by teachers in 1977 gave way to hostility toward the entire system of government (A.Booth, p.75). Students rallied to support the teachers, and the protests erupted in violence. The government response was to ban the teachers' union. This was the only time it was forced to ban a union outright. Other unions had given in to pressure and disbanded on their own. Factional disputes in the ruling class erupted soon after Sobhuza's death in 1982, and one year later teachers and students were involved in active protest against the increased repression allowed by a new anti-sedition law

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* Most notably, Swaziland had allowed construction of two rail links to a South African port. SADCC had previously agreed that all efforts should be focused on development of transportation links to ports in Mozambique (A.Booth, p.114).

passed by the faction in power (Davies, p.60). Many people had been detained without trial during this period. The country remains an autocratic state where detention without trial is within the law and a violent crackdown on the ANC* also affirmed that the government remained committed to cooperation with South Africa.

The Economy Since Independence

By the time of independence, foreign capital--mostly British and South African--had a firm hold over the economy of Swaziland. Mining, forestry, commercial agriculture--the growing of fruit and sugar--and a young manufacturing sector began to flourish. Swaziland continued to offer incentives to encourage foreign investment; the government made promises not to nationalize private industry, allowed free transfer of profits and maintained a cheap and docile supply of labor (Davies, p.10 & A.Booth, p.92). The common customs union worked to benefit South Africa, allowing that country to formulate economic policy for the entire region (Baffoe, p.328). Large numbers of Swazis went to South Africa as migrant laborers, working for very low wages in mines, on farms and as domestic housekeepers. The Swazi ruling class had also managed to begin accumulating capital for itself through a corporation called *Tibiyo Taka Ngwane (Tibiyo).*

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* African National Congress--an organization dedicated to the abolition of Apartheid in South Africa.

The South African customs union encompasses Botswana and Lesotho along with Swaziland. It is theoretically a free trade area which gives each member a pre-determined percentage of the customs revenue. As Davies explains, South Africa was given free access to the markets and the raw materials in these countries. Reciprocal access should have been allowed to South African markets, but products competing with South African products were not allowed to enter that country (Davies, p.12-13). As A. Booth noted,

> South Africa, in fact, continues to hold a virtual monopoly over each country's import and export traffic (90 percent in Swaziland's case), which adds to their dependency, and Swaziland is further enmeshing itself into this network (A.Booth, p.111).

As the economy of Swaziland became further dependent on South Africa, it continued to contribute to the development of the South African economy.

The Swazi royal family has transformed itself into a comprador bourgeoisie in a close alliance with foreign capital, and has made substantial strides in domestic capital accumulation largely through the formation of *Tibiyo*. Sobhuza set up the institution in 1978 with mineral royalties, later used to buy shares in agribusiness, industry and tourism (A.Booth, p.106). *Tibiyo* operates independently of the ministry of finance. Its records are not open to the public. A commission of inquiry into corruption attempted to gain access to these records and after an ensuing battle with the *Tibiyo* faction of the rulers, it was declared a National Development Agency, allowed to ask for funds from the Ministry of Finance, but not responsible for

opening up its records (Davies, p.19-20). Since it became a National Development Agency, its efforts at development have favored large scale agriculture, not peasant production (Levin, p.207). *Tibiyo* has helped to make capitalists of the ruling class, who depend on capitalist forms of exploitation, and have not used the profits accrued to benefit the masses. Swaziland remains an export-oriented economy which cannot produce enough food for its population (Cobbe, p.442).

> The impressive growth rates of the early 1970s have given way to stagnation, rising debt, balance of trade deficits, underutilization of manufacturing capacity as well as closures and shut downs of industrial enterprises (Levin, p.Vi).

Reasons for this decline are connected with a fall in the price of sugar, upon which Swaziland is heavily reliant, and its relatively disadvantaged position *vis-á-vis* the Bantustans of South Africa which now offer better investment incentives. The results of the decline are a serious unemployment problem, rising debt and an increased reliance on foreign aid (which amounted to $77 million in 1980) (A.Booth, p.116).

D. Conclusion

The life of the masses in Swaziland has not improved as capitalism has penetrated the economy. Out of every 1000 children born, 374 die before they reach the age of five years (de Vletter, p.186).

Approximately one-third of young children are malnourished to the point where their growth is stunted (National Nutrition Survey, p.6). Of the rural population, 84% do not have purified water to drink (Green, p.16). Disease is widespread.

The family unit cannot live without wage earnings and the existing level of wages cannot completely support the family. Those who work most often must go away from home to do so. The loss of these people, along with the children who now attend school, places a heavy burden on the homestead as an economic unit. Thus the need for cash money which caused family members to leave the homestead in search of work, is intensified by the subsequent decrease in production by the homestead.

Politically the average person is denied the liberties which we take for granted in the Western world. Participation in policy making is not allowed. Censorship of the media makes it impossible for Swazis to speak out against the government; those who succeed in making their protests heard take the risk of being detained without a trial. Any type of meeting is illegal unless permission is granted. This repressive climate together with the inculcation of traditional values makes people afraid to speak out.

CHAPTER 4
EDUCATION IN SWAZILAND

A. Introduction

Formal education came to Swaziland in much the same way as it did to other colonial countries, especially those in Africa. A traditional, informal education was in place before the arrival of the European. This education was functional for people living in Swazi culture. In the early years of this century, the first formal education was provided by missionaries who began to educate a small number of students. As in other colonies, a few individuals were needed to do clerical jobs and the first students were trained to meet these needs. Britain, however, spent very little on education in Swaziland until after World War II when it became clear that South Africa would not be taking over the territory (Halpern, p.108). When the missionaries came, it was because the Swazis invited them and not due to any influence from the British Colonial Office.

The process of acculturation which introduced an entirely new set of values began in the school and produced a cultural dissonance which is still a problem at the present time. Individualism and competition directly contradicted the Swazi value of conformity. Value in individual achievement clashed with respect for age. A new attitude towards the nature of scientific knowledge conflicted with their belief in ritual and the supernatural. Students were expected to do

boring, mechanical tasks while sitting in one place for hours and they were taught to respect time. All of these were foreign to the Swazi. The new values helped to prepare the children for the way of life which was about to descend upon them.

Initially, and up to the 1950s, education provided a direct route to a job which increased the wealth and status of the individual and the families of people with jobs (A.Booth, p.56). The world economic boom of the 1960s was instrumental in producing an optimistic faith in education. Proponents of *Human Capital Theory* maintained that education was an investment in human capital and this would directly lead to economic growth. World-wide recession in the 1970s in spite of massive educational investment in the 1960s, caused governments throughout the world to reassess the value of the massive increases in expenditures on education. Swaziland, along with many other Third world societies, was left with a substantially enlarged education system organized to produce manpower for an expanding economy (Bhola, p.15). High expectations remained even though it was becoming clearer that educated people would not necessarily get the type of jobs which were commensurate with their qualifications.

In a society where some family members must work for wages, families continue to invest in education, and they now spend a disproportionate amount of their income on educating their children. Fion de Vletter found that education was one of the top expenditure priorities of the homesteads, while at the same time most

homesteads were not able to feed family members adequately (de Vletter, p.25). Early forms of formal education were purely academic and the status of an academic education remains high. People are not willing to accept more practical subject areas such as home economics. Even though reality dictates that most people will remain on the homestead after schooling, they will not give up hope of acquiring a well-paying job, access to which was, at one time, secured through an academic education.

B. Traditional Education

With the informal system of education, instruction did not take place at a specific time or in a special place, but it was integrated with daily activities. When children were very young, they learned from their elders and their peers. As they grew older, the boys in particular learned through their experience in the age regiments (*libutfo*). Children learned appropriate modes of behavior, values functional to the tribe and the history of their people through stories and songs.

Young children on the homestead were gradually introduced to the ways of the tribe. From birth until weaning the child was almost always with the mother who taught some basic concepts and how to behave correctly--to obey and to be polite. After weaning, the mother still played a role in educating the child, but the child now learned more from his peers and other elders. As Kuper explains,

children learned both through overt direction and unconsciously through riddles, verbal memory games and songs. The stories told to them, "though ostensibly meant to entertain, frequently point out a moral" (Kuper, 1964, p.51). As soon as children were physically able, they took on adult responsibilities. Girls spent more time with the women, who taught them how to make mats, baskets and clay pots; how to cook, and carry water and wood; and how to hoe, weed and harvest the fields (Marwick, p.44). Boys at this stage were expected to develop physical prowess and mental discipline, to prepare them for taking an active part in public life. "Boys must become self-reliant; they learn how to use a spear and build a shelter; how to slaughter, skin and divide an animal. They [were] trained to fence and wrestle; and [were] instructed in the 'correct method' of argument" (Kuper, 1961, p.117). Children were prepared to adopt their social roles determined by their gender, the woman subservient to the man.

Age regiments, formed in the 19th century, were a military reorganization by the state to protect the tribe from raids. The regiments cut across local boundaries and kinship loyalties so that men would be loyal first and foremost to the Dlamini monarchy. An elder appointed by the king to each regiment would be responsible for teaching appropriate values and behavior to the young men (Kuper, 1961, p.56). Female regiments were organized locally and functioned mainly to emphasize the woman's domestic and local duties; they were, in fact, working teams for the local chief.

Traditional education helped to reproduce the social order of the tribe. Respect for status ascribed to males and to those clans high in the hierarchy, and respect for wisdom acquired through age, was crucial to maintain the status quo, and therefore this kind of respect was taught to all children. They were taught to conform by accepting their status in this rigid social order. Formal, European-style education later challenged each of these premises.

C. Formal Education

Formal Education up to 1945

Eventually both the Swazi and the British supported the establishment of schools in Swaziland, but for different reasons. British reluctance to invest any money in educating the Swazi was due to their anticipation of South Africa annexing the territory, and to their general reluctance to become involved in the region. It was only after 1945 that any British funds were allocated for this purpose (Halpern, p.108), at which time it became clear that Swaziland possessed previously undiscovered natural resources. Brian Marwick, resident commissioner, and L.S.Amery, Colonial Secretary, had emphasized a need for schooling to ". . . meet the economic changes thrust upon the Swazi people by the impact of Western civilization " (Marwick, p.294) But this happened only when the British discovered the territory was a source of potential economic gain. The British had realized several decades previously

that school was an excellent way to prepare young people to take part in the 'modern' work force; a minimal level of literacy had become essential, and experience performing tedious tasks for hour upon hour while sitting in one place and learning to obey the clock were all essential for people bound to work for wages. The easiest way to introduce the necessary values and language skills required by the emergent cash economy was to teach the Swazi children the same curricula used in Britain.

The Swazi ruling class, on the other hand, having realized they had lost control of their economy, saw education as one source of the power the Europeans held over them. Queen Regent Gwamile therefore extended an invitation to missionaries to set up schools in Swaziland, in an attempt to help the Swazis acquire greater control over their own economy (Kuper, 1964, p.13). It was due to her initiatives that Sobhuza, the young heir to the throne, became the first monarch to receive a formal education.

Racial segregation of schooling with a far superior education offered to European children, paralleled the organizational pattern of education in South Africa. Primary education had been free and compulsory for white children since 1920 (Kuper, 1947, p.73) but up to 1945 Swazi children were only offered a four year education and only 30% of the relevant age group was attending school (Maimbolwa, p.4956 and Kuper, 1964, p.82). The Swazis who attended school, were taught mainly by unqualified teachers (4/5 of

the teachers had no more than 6 years of education themselves) and the schools were poorly equipped (Kuper, 1947, p.73).

In the early 1930s Sobhuza, in an attempt to heal the rift developing between Christians and non-Christians, educated and non-educated, set up the Swazi National School which attempted to integrate the traditional system of education with the modern. The experiment failed for a variety of reasons outlined by Kuper. First,

> the spirit of the old *libutfo* was dead--it was fundamentally a national military and labour organization, which had not been able to survive under the new political and economic system. Force had become the monopoly of the British government, and labour the commodity purchased by European employers" (Kuper, 1947, p.76).

In addition to this, the traditional instructors who originally taught tribal law and custom could not work in the foreign environment of the classroom. Finally, the missionaries did not support the idea which they felt was a step back to 'primitive conditions', especially since the emphasis would be on traditional religious practices and away from Christianity (Kuper, 1947, p.77). Sobhuza then focused on other methods of keeping traditions alive, as discussed in Chapter 2.

1945-1968

Educational opportunities increased during the 1945 to 1968 period, but by the year of independence, i.e. 1968, only half of the relevant

age group was attending school for the first four years (Maimbolwa, p.4956), and very few were attending secondary school. The influx of some British money was used to construct more schools and pay more teachers, but education was still mainly the responsibility of the missions. Schools were racially integrated just prior to independence, but the new policy did not change the vast discrepancies between the quality of education for blacks and whites (Halpern, p.410). White students, for the most part, attended the elite schools in the country or moved to South African schools for white students. The first Swazi students to pursue a secondary education (Sobhuza among them) went to South Africa, but after 1955 they were no longer welcome to attend schools across the border. In 1962, only 18 students in Swaziland wrote the matriculation examinations; this gives a strong indication of how poorly prepared the territory was, in terms of an educated stratum, to begin governing itself (Halpern, p.411).

This formal, western education began to introduce the Swazi to an entirely new set of values, many of which contradicted traditional values. Respect, in the western value framework, is not granted automatically by virtue of age, gender, or birthright, but must be earned through achievement. This attitude toward achievement, contradicted the traditional value of respect granted by ascription and was central to a difference between the two cultures. Thus students in Swaziland, as in many parts of the Third world, experienced 'cultural dissonance'. This dissonance is still fostered by the education system.

Developments after Independence

During the decade following 1968, opportunities for education at every level increased at a phenomenal rate. Enormous amounts of money were spent on building new schools, and expanding teacher training facilities and other post-secondary institutions (Rose, p.114). At the same time the government adopted a policy of localization of private sector positions. There were not enough qualified teachers in the schools before the expansion and before the localization policy. Consequently, the quality of instruction decreased, as indicated by the drop in the O-Level exam pass-rate until 1973 when it began to slowly rise again (A.Booth, p.59). There has since been a steady improvement in the qualification of teachers--95% of primary teachers were qualified in 1984 as compared to 72% in 1968. In the secondary schools, there was an initial decrease from 91% of qualified teachers in 1968 to a low of 73% in 1975, though this figure has improved steadily since then. In 1984, 89% of secondary school teachers were qualified (Swaziland Annual Statistical Bulletin, 1968,1977,1979, 1980, 1984). It appeared in 1987 that the market for teachers was nearing the saturation point; this meant that most teachers were qualified. It should be kept in mind, however, that primary teachers had only been required to complete 10 years of public schooling and 2 years of teacher training. Due to the saturation of the market, primary teacher training colleges have begun to increase their entrance requirement to O-Level (matriculation). Also, many teachers of students studying for the O-Level do not have a University degree. Due to a shortage of teachers

with this qualification, many who were qualified for junior secondary teaching are teaching students for the O-Level examinations. *

Government statistics show a steady increase in enrolment figures at all levels of the education system, but these do not indicate whether the participation rate has been rising. The country has a crude birth rate of 3.4% per annum (Russell, p.295) and a population of 626,000 (Annual Statistical Bulletin, 1984); if the figures had indicated the percentage of the relevant age group enrolled in schools, we could attain a much clearer picture of the situation. The number of primary schools has increased from 358 to 467 in the 1968-1984 period. Correspondingly, the number of secondary schools has increased from 31 to 89. Over the same time period, primary enrolment increased from 62,082 to 134,528; and secondary enrolment from 3,792 to 28,833 (Annual Statistical Bulletins, 1968,1984).

The Second National Development Plan (1973-1977) established the priority of developing higher education to meet manpower needs; it planned to achieve universal primary education by 1985 (Bhola, p.15), and it formulated a goal of providing 10 years of basic education for all students (Survey of Basic Education in Eastern Africa, p.10). The University of Botswana, Lesotho and Swaziland, which served all three countries, has been disbanded to form three separate universities. For countries with such small populations, the

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* These comments are based on my experience in the country and on discussions I had with people involved in education.

rationale of each paying the extremely high price of supporting a university should be questioned, especially in light of the inadequacy of basic education provided. In 1980, the illiteracy rate of people in Swaziland over 15 years of age was 39% (Bhola, p.15). Although the government expressed a desire to provide basic education to its people, students receiving primary education still have to pay school fees, and attendance is not compulsory. The administration of adult literacy programs has been left to non-governmental organizations. The curriculum in primary and secondary school remains academic in its orientation -- highly impractical for a population where only a select few will reach university.

Although the policy of the Ministry of Education is that individual schools do not have the right to be selective in their admission policy, in fact there are several secondary and high schools that accept only students who have achieved highly in the exams written at the end of primary and secondary school. These schools are recognized as institutions which produce very high grades. They tend to have the best teachers and a more stimulating intellectual environment for students. Thus, although the education system professes to have the best teachers and a more stimulating intellectual environment for students. Thus, although the education system professes to provide equal educational opportunity, it is informally stratified and provides a higher quality of education to a certain group of students.

Modern attitudes to education are based on the experiences of past decades. By the late 1950s, 92% of those completing secondary

education were employed in the cities. Less than half of those with no education got wage earning jobs. Those who were educated and employed earned 2 1/2 times the salaries of those with no education (A.Booth, p.56). Parents who lived through this time continue to see education as a way out of poverty. They expect an academic education for their children and resist attempts to make it more practical. Fion de Vletter found in his survey of rural homesteads, that, next to purchases of food, education was the most important item of expenditure. Further, unlike other forms of expenditure, there was little correlation between expenditure on education and cash income flow of the homestead and no correlation with wealth of the homestead (de Vletter, p.52). De Vletter's research indicates that people do not want to invest in functional education which would attempt to provide students with skills to help them increase production on the homestead. Further, they have little faith that the remedy for their poverty lies in the improvement of the homestead. It is bound to become clearer as the years pass, however, that the investment in the education of one's children is most often not going to bring adequate returns to that investment, because there are no longer well-paying jobs available for all educated people.

D. Conclusion

In critically analyzing a system of education in a developing country, some key questions must be asked. What is the meaning of development? Is this education system helping the country to develop? Is the education provided meeting the needs of the majority? If not, whose needs is it serving and why is this the case? Education is always considered a means of preparing the young to contribute to society as they became adults. Chapter Two has illustrated the foundations upon which Swazi society is built; it is a rigidly stratified society based on ascribed status and authority, economically structured to maintaining a ruling class which acts in a comprador role for foreign capital. If the politico-economic organization is not helping the country develop, how can its education system hope to do so?

Even the stratified nature of the school system in Swaziland serves to recreate economic disparities and to reinforce the power base of the economically advantaged. The schools have become distinctly different in terms of the success rate of their students on external examinations, with students from a higher social class having the advantage of being admitted to these schools. Since schools in Swaziland charge fees for students to attend, this obviously means that those who can afford the high costs, have a better chance of success. And insofar as the better schools tend to be in urban areas, or to be boarding schools in rural areas, and insofar as well-off families tend to live in the towns and are more able to afford

boarding fees, their children have better access to good schools from the beginning of their educational careers. Even though, as mentioned above, all families devote a large portion of their incomes to education, the poorer families in the rural areas might not be able to get their children into good schools, or to afford sending all of their children to complete the high school program.

Aside from this purely economic factor, students from middle and upper classes come from a 'richer' cultural background. They therefore tend to possess the necessary*cultural capital* (a concept developed by Bourdieu and Passeron), which enables them to do well at school, and it thus explains why students with such backgrounds tend to surpass other students academically. As Michael Apple explains,

> cultural capital ('good taste,' certain kinds of prior knowledge, abilities and language forms) is unequally distributed throughout society and this is dependent in large part on the division of labor and power in that society" (Apple, p.33).

Students from advantaged families in Swaziland tend to be exposed to a more 'western' set of values; they tend to have a more stimulating intellectual environment to grow up in; and, most importantly in this situation, they have a better knowledge of English, the medium of instruction in secondary schools. Since there is stiff competition to gain admission to a limited number of secondary schools, these students with the 'appropriate' *cultural capital* are likely to make up much of the secondary school population. And they are far more likely to be admitted to the few

secondary schools which have established excellent reputations--schools that have managed to adopt a policy of selecting only the best students, even though this is not consonant with the policy of the Ministry of Education.

In conclusion, one would be inclined to agree with Michael Apple: poor achievement is 'not an aberration,' but rather it has been institutionalized (Apple, p.33). Although authority is granted mainly by ascription in Swaziland, the schools legitimate the power of certain groups by virtue of their academic record as high achievers who are able to earn their positions on the basis of grades (merit). And, it is the educated members of the élite who are usually given the authority to exert power.

The attitude that academic subject areas contain 'high status' knowledge, and that the practical subjects teach 'low status' knowledge (Apple, p.78), has become well entrenched in Swaziland. It is clear that an academic education is no longer helping most students. For an outsider looking at the situation, it is easy to make the judgement that development cannot occur without the improvement of life on the homestead. Hygiene, nutrition, and agricultural production must all be improved in order to raise the living standards of the rural majority and an excellent way to do this is by incorporating this kind of (functional) knowledge in the school curricula. When the Swazis refuse to study these practical subjects, which carry a low prestige, they are conforming to a common pattern

of resistance to alterations in the relationship between high and low status knowledge.

> This [resistance] would also probably mean that attempts to use different criteria to judge the relative value of different curricular areas will be looked at as illegitimate incursions, as threats to that particular 'order.'" (Apple, p.39).

As long as the social 'order' remains the same, it may not be possible to change these attitudes. According to this analysis, it could be concluded that education is <u>not</u> contributing to the development of Swaziland, but is serving to maintain the *status quo*. Faith in the premises of modernization theory continues to be strong, even when the attempts to incorporate 'modern' ideas and practices have not served to move the country along the path to development. The production of manpower to meet the needs of a modernizing society produces few benefits when the products of the education system are faced with unemployment on a large scale. The emphasis on 'western' values means that people look upon manual work, and some aspects of tradition, with disdain. Schooling has not helped the homestead to develop, but has encouraged values inimical to development.

CHAPTER 5

THE STATE OF THE FAMILY

A. Introduction

In order to fully understand the contemporary curriculum in home economics, it is necessary to look closely at changes that have taken place in the family as a result of radical restructuring of the political and economic institutions of Swazi society. The traditional family was almost completely able to sustain itself; when times were lean, families helped each other and the royal family would distribute its stores of food. The modern Swazi family does not produce enough to meet its own needs and cooperative assistance is now rare. Diet, which once provided all essential nutrients, is now seriously lacking for many people. A more crowded and sedentary lifestyle has increased the spread of disease carried by flies and through contaminated water. A once solidly functional value structure which held the family firmly together has not been able to adapt to the changes imposed from outside on this basic social unit.

B. The Traditional Family

The Swazi family which existed prior to any influence by the Europeans seems to have been a cohesive social unit which, for the most part, worked very well to serve the needs of family members. Adequate clothing, nourishment and shelter were provided; division

of labor was functionally efficient; family life education was a priority. Resources which provided sustenance to the family were acquired locally -- from the land, from the animals which each family kept, and from the labor of family members. Although the needs of women and children were subjugated in this hierarchical , male-dominant society, there was a general state of well-being in the population.

Natural fibers were not used to make fabric for clothing; traditionally clothing was constructed out of animal skins. When a domestic animal was slaughtered, or when wild animals were killed in a hunt, hides were tanned, cut, and distributed as clothing; the type of apparel depended on age and gender (Kuper, 1964, p.3). With the coming of the Europeans, pieces of cloth were used together with animal skins.

Responsibilities of family members were carefully laid out and behavior patterns were strictly enforced, with the result that labor was fairly evenly distributed among those of physical ability. Status and authority were always ascribed first to the older family members and secondly to the males. Women were responsible for child care, food preparation, the making of grass and clay items for the home, and most duties related to cultivation. They were obedient to the wishes of their husbands, and their in-law parents. Men were responsible for animal husbandry (including any agricultural activity such as plowing which required the use of animals), for hunting, and for warfare. They were the public figures,

the orators and councillors, and the family priests (Kuper, 1964, p.45).* Children did a good share of the work, as soon as they were physically able. Each family member contributed according to his or her physical ability; and the needs of each were taken care of, with the possible exception of nutritional needs, as shall be illustrated later in this section.

Family life education was well provided for in the traditional system of education, a system which included education conducted within the family unit. Instruction on the appropriate modes of behavior described above, on accepted ways of choosing a mate, pursuing marriage, and the bearing of children was incorporated into everyday conversation from an early age. In fact, this education emphasized mainly traditional values and not knowledge *per se* (Kuper, 1964, p.56). The strong sense of morality which was inculcated in the Swazi allowed for little deviation from the socially accepted norm, giving the family a firmly grounded stability. Of particular relevance to this study is the way in which child bearing was restricted. Although most women would marry at a relatively young age, they would not be allowed to have large numbers of children.

> In former times a woman would avoid conceiving a second child until her first child was able to run. The child would be about two years of age and recently weaned. This custom is attributed to wartime conditions, so that a woman could flee with

* The head of the homestead was responsible for ritual dealing with worship of the family ancestors. He would conduct ceremony and make offerings to these spirits (Kuper, 1964, Chapter 6).

> one child on her back and the other running alongside (Jones, p.170).

The husband's mother would discourage sexual intercourse until the child was old enough for the mother to conceive another. This spacing would help to ensure the woman would not have too many children, as well as helping to ensure the young child received adequate nutrition. The woman was not allowed to conceive a child after her eldest son was adolescent. "The two-year spacing, high infant mortality, and the limit to the child-bearing period ensured that many women did not have more than four or five children" (Marwick, p.131).

Although the general state of health in traditional Swazi society cannot be ascertained, some reasoned speculation gives us a good idea of what the situation was. Traditional medicine, over the centuries, had discovered how to use plant materials to treat illness, but many illnesses could not be successfully treated in this way. As a result, there was always a certain amount of illness which was untreatable and unexplainable except in the realm of the spiritual world.* But, apart from this type of illness, a fairly high level of health was likely maintained. The areas inhabited by the Swazi were sparsely populated, and the population was mobile. This would mean water would be far less likely to be contaminated by human

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* Traditional Swazi religion involves ancestor worship and a belief in witchcraft and sorcery. Ancestors are believed to be present in a spiritual form after their death. They ensure that correct values and behavior remain among those they have left behind. Certain people are believed to possess powers of witchcraft which they use to punish or to do evil to others (Kuper, 1964, Chapter 6).

and animal waste than it is at the present time. Therefore, diseases spread through contaminated water would not have been a serious problem. Health would also have been fairly good because the general pattern of food consumption was adequate to sustain a healthy body, a body that would be able to ward off the kind of illnesses which can devastate a malnourished body. I will now take a close look at the food consumption patterns of traditional Swazi society.

On the whole, the average Swazi was provided with both an adequate quantity of food and a good supply of all of the essential nutrients. Protein was supplied by the milk produced by each family's cattle herd, and supplemented by the occasional feast of meat. Vegetables and fruit of many varieties grow wild in the area--they were gathered and eaten raw, or cooked; and many vegetables were dried to preserve them for times during the year when they were not available. When vegetables were cooked, generally they were not cooked for a long period of time; and the water used for cooking was also consumed -- methods of cooking which resulted in a minimal loss of nutrients (Jones, p.127). Millet was the traditionally cultivated cereal grain which rounded off the nutritionally sound diet. The area the Swazis have inhabited is normally very well watered, but there has always been periodic drought which would have caused famine in these times. Therefore, although the diet was

well balanced, when the rains were poor, all types of food became scarce and people would be undernourished.*

Consumption of animal flesh was sporadic in traditional Swazi society. During the winter, when animals were hunted, it was likely eaten on a more regular basis (Jones, p.66). Cattle have always been very important to the Swazis, and not just for their meat. They provide draft power for plowing and manure for fertilization (although use of manure in this way is a more recent phenomenon). They are a sign of wealth for the family--many cattle mean higher status. The *lobola*, or bride-price, was always paid in cattle, and a man could not marry until he possessed enough cattle to give to his prospective bride's parents. For these reasons, cattle were slaughtered only on special occasions such as weddings. These would be large gatherings; the entire animal would be cooked and either eaten or taken home by the guests. Fish, although available in the rivers flowing through Swaziland, was never eaten. Also, some birds and animals are forbidden food for certain clans, in keeping with the Swazi mythology (Kuper, 1964, p.42). There was no method used to preserve meat; it was consumed immediately. Therefore, in terms of providing the daily protein requirement, meat played a minor role.

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* There is a qualitative difference between malnutrition and undernutrition--the former referring to a deficiency of one or more nutrients in a diet which may or may not provide enough energy. The latter term reflects a general deficiency of food; a lack of all the nutrients including energy giving foods.

Milk, normally consumed in its soured form (*emasi*), was the principal food of the Swazi. It would be served to everyone for breakfast, and also for the evening meal--often mixed with boiled and crushed cereal grains and served with wild vegetables (Jones, p.66). "Under ideal conditions Ngwane* cattle could be fairly prolific producers of milk, sometimes giving as much as two to three gallons a day" (Bonner, p.15), to which the current average of one pint hardly compares (Jones, p.41). At this time there were many cattle and an endless supply of grazing land. In 1897, a disastrous outbreak of *rinderpest* , a deadly cattle disease, destroyed approximately 54,000 of these animals in Swaziland (Jones, p.66). This epidemic "caused the radical change in the diet from one in which the main ingredient was milk to [one in which] the staple [food was] maize" (Jones, p.66).

Maize was most likely introduced into Swaziland toward the end of the eighteenth century (Jones, p.66), and it gradually became more popular than millet (also called sorghum). Although millet is more drought resistant and slightly more nutritious, maize grows on cobs which are naturally better protected from attack by birds than is millet. Traditionally children were given the duty of scaring the birds away, but as they began attending school and were no longer able to do this, maize became the staple cereal. As cereal began to replace milk as the principal food, the protein content of the diet decreased.

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* *Ngwane* is a term used interchangeably with *Swazi* . Ngwane III was the name of the king who ruled from 1750 - 1780.

Traditional patterns which allocate food to family members and which prohibit women and children from eating certain foods, were (and still are in many families) based on status within the family and not nutritional need. Food was allocated according to rank in the family, and according to age and gender. The head of the household received the first portion; his mother was served next. The children followed; they ate from common bowls--one for the older boys, one for the younger boys and one for the girls. Last in line was the wife, who would eat what remained of what she prepared (Jones, p.59). When meat was eaten, certain parts of the animal were reserved for specific family members, "for example, the flesh of a chicken is given to adults, while a child is given the feet to suck" (Jones, p.60). Thus food was allocated in reverse to nutritional need: women in their child-bearing and breast-feeding years, have the highest protein requirement, followed by the children who are growing most rapidly, yet they were the last to be provided with such food.

Prohibitions of certain foods further aggravated this situation. Eggs, which are an excellent source of protein and other nutrients, were traditionally never given to women. A myth which warned that eggs caused women to lust after men is responsible for this. Children were also never given eggs because of some superstition. Prohibitions concerning milk were more serious, since it was the major source of protein. A woman was not allowed to have meat or *emasi* from her husband's herd until she had her first child. Occasionally a woman's father will give her one cow, from which she could drink the milk, but this has never been the norm. After the

birth of the child, a ceremony was required whereby the woman was given permission to drink milk, but often this ceremony was not performed which meant that the woman could never drink milk. In addition,

> girls and women abstain from *emasi* during periods of menstruation, but are allowed to handle it during food preparation. A woman after a miscarriage or childbirth does not eat *emasi* for a month, and upon the death of her husband she forsakes milk (Jones, p.76).

The potential danger to the developing child in a pregnant woman who receives inadequate protein is grave; and lactation will not be sufficient to nourish the newborn if the mother is in a similar situation.

Traditionally, newborn babies were not breast-fed immediately after birth. The baby was fed only watery maize porridge for a few days, usually until the umbilical cord dropped off. The reason for this delay was the belief that colostrum is harmful. It was expressed from the breast by hand until milk was being produced and the baby was 'ready' to breast-feed (Jones, p.171). In addition to producing gastro-intestinal problems, the infant was thereby deprived of the many benefits of drinking this first liquid secretion of the breast. The enzymatic effect of consuming colostrum helps to clear mucus out of the gastro-intestinal tract and prepare it for digestion of milk. It also speeds the eliminatation of substances from the intestines which cause jaundice in the newborn. Colostrum is high in maternal

antibodies, which protect the child against allergens and pathogens with which he/she may come into contact (Hotchner, p.558-559).

Even though the general diet of the Swazi, in times before contact with the European, was nutritionally adequate, these practices of allocating food to those at the top of the family hierarchy, and prohibiting women and children from consuming the most nutritious foods available, were clearly detrimental to their health.

C. The Modern Family

The Swazi family of today has undergone so many changes that its resemblance to the family of the past is sometimes difficult to detect. The forces which held the family together have been eroded by the changing society. Land is no longer plentiful and neither, therefore, is the food which that land once produced. The economy is no longer based entirely on peasant production. People have to engage in wage labor; it is impossible to live without money in modern Swaziland. Yet the wages are abysmally poor. And production on the homestead shows that the land is poor and that there are not enough hands to work it. Families are separated for long periods of time. Traditional values clash with modern values; the way to live one's life is no longer clearly indicated in cultural practices. The family is suffering.

Dietary Changes

One of the most notable changes, and one which forms the core of this study, is the change in food consumption patterns. There are two major reasons for this change--the first being a decreased production of food on the homestead. The second reason is that families are now buying some of their food. As a result of these changes, most families no longer receive the nutritionally balanced diet that they once did. The pattern of giving the most and the best food to the elders and the males continues and when there is not enough protein to start with, the children suffer the devastating consequences of malnutrition.

The *rinderpest* disaster of 1897 drastically reduced the amount of milk available, and maize was then substituted as the major food. Land concessions being granted during the late 19th century, and the restriction of movement due to newly drawn borders drastically reduced the amount of grazing land available. For this reason, milk production remained low, ensuring that maize would remain the staple food. The land available to the Swazi had been drastically reduced; the new borders of their territory included a much smaller area than they had previously had access to, and Europeans were now occupying much of what was left. They were never able to maintain their cattle population at previous levels when grazing land was so restricted. To replace the milk they had lost, the Swazis began to cultivate maize in much larger quantities, maize being a food which could never provide the protein value that milk once did.

After their traditional economy was disrupted, the Swazis were not again able to produce enough food for themselves. Hilda Kuper, an anthropologist known for her research on the Swazi, reports that in the early 1930s, Swaziland was only growing one-fifth of its food requirements. The remainder was imported from South Africa. She noted that it was becoming increasingly difficult to find fertile land, and that deforestation and erosion were already serious problems in 1938 (Kuper, 1954, p.4). Increasing population--both of people and of cattle--was severely taxing to the land. Indigenous forests were gradually being used for firewood; this, combined with overgrazing, created a serious erosion problem.

Cattle remain very important to the Swazi. Sonya Jones noted in her nutrition research conducted in the 1950s that "the Swazi are essentially still pastoralists in outlook and practice" (Jones, p.26). Jones indicated that at the time of her study the country was overstocked by 86% on the basis of permanent grazing land and by 60% if fallow land was included (Jones, p.26). The Swazi had little knowledge of correct agricultural techniques; they most often planted maize on the same plot year after year. This would not have created a problem if they had continued to be shifting cultivators; but, as it is, the soil is continually sapped of nutrients by the perennial cultivation of maize. During the 1970s, as population was increasing, domestic food production remained static or it declined (de Vletter, p.165). Unless development schemes begin to deal with these problems, instead of focussing on large-scale commercial

agriculture, homestead production of food will continue to be insufficient.

But there is another factor which contributes to the inadequate production of food--the loss of family labor from the homestead. Since the imposition of hut taxes in 1895, and the gradual introduction of a market economy, those members of the family who are able go to work for wages.* The introduction of schooling around the same time period has gradually taken away more of the children from the homestead. Those remaining are, for the most part, women, small children and the elderly. These women bear an incredible burden of responsibility. They must carry water and firewood to the home, clean the home, do laundry, prepare food, and care for small children, in addition to cultivating the land. The women "also monopolize most homestead-based non-agricultural income-generating activities like handicrafts, beer brewing and selling produce" (de Vletter, p.24). While this may have worked well when all of the men were available to provide meat by hunting, and to help with some of the agricultural tasks, and when the amount of food grown was comparatively small, it is no longer an adequate arrangement. Today's homestead is not an efficient production unit; but produce it must, given the economic reality whereby most workers are not paid enough to support their families. This is the

* One-third of the adult workforce is absent from the homestead, and most of these are male. Of adults not engaged in wage employment, 72.3% are female and 42.2% are male. Most of these people are working in the urban areas of Swaziland, but 24% go to South Africa for work (down from 40% in 1960) (de Vletter, p.22).

notion of articulation of modes of production translated into a description of daily life.* While in the past, larger families were efficient units of production, this is no longer the case. A homestead survey, conducted during the 1970s, indicated that the larger the household, the less adequate is the diet provided (de Vletter, p.183).

Partly because not enough food is produced on the homestead, and partly because marketing strategies have effectively convinced people that they need to buy food and other consumer goods, a proportion of the food consumed at home is now purchased from a shop. But most families simply do not have the resources to acquire a nutritionally balanced diet. Since maize is the least expensive food item,* it comprises the bulk of the diet, filling the stomach without providing adequate nutrients. When maize is purchased, as it often is, it is only available in the refined form, in which the most important nutrients are removed. Families now purchase some meat, fruits and vegetables, baked products and packaged food. The prices of these foods are increasing at a rate much faster than increases in real wage (de Vletter, p.165). Since meat is very expensive, and domestic animals are still not slaughtered except on special occasions,

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* I should note, at this point, that I am speaking about the lives of most families, or the norm. There certainly are people, moreso in the towns, who earn enough money to support their families very well. There is a definite class distinction here. This 'middle-class' group is, however, a small proportion of the population. Some of the people who have moved to the towns are even worse off than those in rural areas, since their opportunity to produce their own food is minimal and their extremely low wages can not buy them enough food.

* Most families do not grow enough maize. In the year previous to de Vletter's study more than half of the homesteads surveyed had purchased some of their maize (de Vletter, p.32).

meals tend to consist of maize porridge with a stew. The stew occasionally contains meat, usually one or more vegetable, and often has a packaged powdered soup as a base. The way in which these packaged soups are marketed leads one to believe that they contain meat and vegetables, and people therefore believe they do not need to spend the money on the real thing. Bread has also been marketed and people like to eat it, since it requires no preparation. Wheat, however, does not grow well in the Swazi climate, and bread is thus an expensive food item. Other convenience foods, including packaged snacks and carbonated beverages, are available in any area of the country. These kinds of foods are expensive and void of nutritional value; they drain the resources which could be used on more nutritious foods. As prices go up*, the quality of the diet continues to deteriorate.

Besides changing general food consumption patterns, the changing economy has had a negative effect on the tradition of helping one another in times of need. Whereas in the past, when rulers would distribute food to the people during periods of hunger, they no longer do so.

> Formerly, a family, verging on starvation, could look to their neighbors for succour, but with the rise of a cash economy, the giving of food to the needy has decreased. Kinship ties which impose laws of hospitality and sharing of food still exist, so that a woman who has no food will beg from her

* The inflation rate has averaged 12.5% per annum from 1970 to 1984 (Swaziland Annual Statistical Bulletin, 1984).

> maiden home, but even these are weakening (Jones, p.58).

De Vletter's findings illustrate the present consumption patterns more clearly. In general, he found that families consumed large amounts of carbohydrate, all of them having maize daily and bread and potatoes either every day or several times a week. Consumption of high quality protein was less frequent, with only 30% of the homesteads surveyed having meat daily or several times a week. Only half of those surveyed indicated that they consumed milk daily or several times a week, and only 20% consumed eggs with the same frequency. Thirty per-cent never consumed milk, and 40% never had eggs. Legumes (dry beans, peas or lentils) which are low quality protein when eaten alone, but when consumed in combination with maize become high quality, were only eaten by 25% of families daily or more than once a week. Thirty per-cent of families never consumed legumes. Nearly all families use the less nutritious vegetables--onions and cabbage--to make their stews. Fewer families consumed carrots, spinach and other dark leaves (including wild vegetables), which are more rich in vitamin A. The exceptions here are pumpkin and tomato, commonly used vegetables. Fruits rich in vitamin C were only eaten by 40% of families; fruit of any kind was consumed by 70% of those surveyed. Many fruits and vegetables are only available in season (de Vletter, p. 177-179).

Traditional patterns of food allocation and restrictions imposed on women are still significant, especially in more traditional homes; and

in situations where protein is limited, the women and children suffer more than they have in the past. When animal protein is served, the adult male gets a substantial portion, and by the time the dish reaches the young children and the women, there is often little remaining. Jones' comment in 1963 on the failure to recognize that a child's nutritional needs are not the same as an adult, still applies today (Jones, p.184). While the children may eat the same amount of meat per kilogram of their body weight as do the adults, this is not nearly enough to meet their nutritional needs.

Most Swazi children are still breast-fed and many continue to breast-feed until they are two years old (National Nutrition Study, p.13). In this sense, the feeding of children has not changed much except that the period of breast-feeding may have decreased by a few months. The problems arise when the children are weaned from the breast, at which time they consume a diet much the same as the rest of the family -- high in carbohydrate and low in animal protein. The protein needs of the rapidly growing child are high and cannot be met with this kind of diet.

Malnutrition

Before discussing the prevalence of malnutrition in contemporary Swaziland, it is important to explain the effect that an inadequate diet has on the individual, and the impediment to development it produces when it exists on a large scale. "The problem of hunger and

malnutrition is much more complex than it superficially appears" (Black, p.3). Severe or chronic malnutrition is a rare phenomenon; children more often suffer from physical problems which are exacerbated by the malnutrition. Rarely would a child survive long enough to starve. The body becomes weakened from not receiving adequate nutrients (protein being the most crucial), and the body will not be able to defend itself against infections which a healthy body would easily fight off. Therefore, many of these children die from diarrhea, respiratory illnesses and childhood diseases such as measles.

Although many children may die in this way, those who survive never develop to their full potential either physically or intellectually. A child who is not properly fed in the first five years of life will not grow at the normal rate. The child will be physically stunted, which will often be the only outward sign that a problem exists. This is a critical time in the growth of the brain; the intellectual development of a child suffering from protein malnutrition will be retarded and he will never catch up to his well-fed playmates. This child

> may not do well in school, and later may become a 'repeater' (repeating the same class from year to year), or a drop-out. Later still, all-day work in the fields may prove hopelessly overtaxing; and there may be no inclination to take part in village or community affairs. In short, although there is no eye-catching tragedy, the child never fulfills his or her adult potential (Black, p.4).

It is not difficult to see that a country which experiences serious problems with nourishing its children will eventually have an adult population that in large measure will be incapable of contributing to the development of that country. This is the case in Swaziland.

Two sets of statistics indicate the extent of the problem in Swaziland: infant and child mortality rates, and the rate of growth stunting in children. Infant mortality (children under one year) is 156 per 1000 live births and child mortality (ages one to five years) is 218 per 1000 population. De Vletter notes that these figures are considered high or very high (de Vletter, p.186). Poor nutrition plays a large, though not an exclusive role, in the deaths of these children. A current nutrition survey found that "[n]early one third (30%) of all young children in the rural areas were nutritionally stunted". The figure was only slightly better (23%) for peri-urban areas. The figures are considerably lower for children under 18 months, but increase dramatically at 18 months (National Nutrition Survey, p.6). A plausible reason for the jump would be the cessation of breast-feeding at this age and a consequent decrease in the amount of protein consumed. One could safely assume that, of these 30%, those who survive would never reach their full intellectual potential.

It is impossible to know with certainty what proportion of the population is victim to nutritional deficiency disease -- for several reasons. Not all people who suffer from such diseases attend a modern medical facility. A comparison over the years would be impossible because of the expansion of the available medical

facilities and the increased utilization of them. Skills in diagnosing nutritional disease vary greatly so that even those who attend a hospital or a clinic may not be diagnosed as malnourished. The reporting systems and classifications of such disease have also changed over the years (de Vletter, p.189). We can, however, get some idea of the dimensions of the problem by looking at the statistics which are available. The death rate resulting from Kwashiorkor (protein deficiency) has been consistently high over the decades, accounting for over half the total deaths in the nutritional disease group. Kwashiorkor and Pellagra (niacin deficiency) are the most commonly reported nutritional diseases (de Vletter, p.189). The current pattern (1975-1979) of people hospitalized for malnutrition is as follows: Kwashiorkor 50%, Pellagra 16%, Anemia 9%, Goiter (iodine deficiency) 2%. The figure for Kwashiorkor in terms of numbers recorded is most certainly distorted toward the lower end of the scale because of its implication in the severity of other diseases; the primary disease (Measles, Tuberculosis, Whooping cough, Malaria, Bilharzia, etc.) would more likely be recorded as the cause of admission.

Kwashiorkor appears almost exclusively in children under the age of five, and is without dispute the most serious nutritional problem. The reasons for this have been outlined in the previous section; protein is simply not available in sufficient quantities for children. Adults are not seriously affected by protein deficiency; they are able to get by on relatively small amounts of protein.

The other nutritional diseases tend to affect adults. Pellagra is particularly prevalent in Swaziland because the staple food, maize, is naturally low in the vitamin niacin. With the increasing tendency to use refined maize, a process that removes the parts of the grain which contain the highest concentration of niacin (among other nutrients), the incidence of Pellagra has also increased. It has a seasonal incidence, occurring more frequently at the end of winter when the maize supply runs low, when wild vegetables are scarce, and when there is more sunlight. Sunlight exacerbates the disease which manifests itself in a skin condition.

> Pellagra is well known to the Swazi (designated by them 'the peeling disease'). Its presence does not always cause the sufferer to seek medical attention and it is frequently regarded as an annual visitation (Jones, p.231).

Goiter is a problem because Swazi soil and water are low in iodine. The solution is to use iodized salt, but not all salt is iodized in the country. Most Swazis tend to use crude salt and crush it at home--this salt is not iodized. Goiter causes the thyroid gland in the neck to swell, a swelling that is not reversible by correcting the deficiency in the diet. The most serious consequence of iodine deficiency occurs when a pregnant woman has the disease. There is a chance that these women will give birth to a cretin--a child with severe physical and mental abnormalities.

Anemia, caused by insufficient iron in the diet, is only a serious problem in pregnant women. A low level of iron consumption will

leave virtually no stored quantities of the mineral in the body. When a woman begins her pregnancy in this state, and many women do, the developing fetus which requires a good deal of iron will take the iron from the hemoglobin in the mother's blood, producing anemia in the woman.

It is the woman of child-bearing age, and the children, who suffer most from the changes that have taken place in food consumption patterns--the people at the very bottom of the family hierarchy. Tradition regarding food distribution within the family, together with the different kinds of food consumed in the modern family, are extremely harmful to women and children in the families which are the poorest and which continue to live very much within traditional value systems. And by reinforcing the importance of maintaining traditional values, the ruling class helps to perpetuate the illness, retardation and death of Swazi children.

General Health

Disease is widespread in Swaziland. Diseases of poverty are common; these are illnesses carried through contaminated water and illnesses complicated by malnutrition. Diseases which can be controlled through immunization persist even though immunization is available to everyone at a very low cost. Illnesses which can be successfully treated with modern medicine often go without such treatment. The generally poor state of health in the country stems from a lack of

resources in most families and an ambivalent attitude toward modern medicine.

Infant and child mortality rates, strong indications of the general health of the population, are high and have not changed substantially in the four decades previous to 1980.

> One would have expected a more noticeable decline over the 40 year period in question, considering the concern of development efforts: the partial control of infectious/ parasitic and respiratory diseases through immunization, the availability and increasing attendance at general medical facilities, the establishment of maternal and child health clinics and their complementary services of food supplements, health education and family planning, not to mention progress in school enrolments" (de Vletter, p.187).

Evidently, illness is spreading faster than these 'development' efforts can work to cure it. The efforts to improve the situation are attacking the surface and not the core, which is composed of a combination of poverty and a fatalistic attitude toward illness.

Mothers of child bearing age (15 - 25 years) are also victim to many health problems. Dr. Q. Dlamini, Medical Officer of the Public Health Unit in Swaziland indicated in 1987 that 160 of every 1000 women in this group die every year (Swazi Observer, March 17, 1987). This figure is as high as the infant mortality rate (children under one year of age).

Certain health problems have been ameliorated by the arrival of modern medicine. Its capacity to treat infection and to immunize has certainly compensated for some of the deficiencies of traditional medicine, but for many reasons, modern medicine has not been able to reach all of the people who might benefit from it. Some of these reasons are purely logistical; people live a long distance from clinics, and access to them is difficult; health care professionals are scarce, and drugs and immunization serum are not always available due to a shortage of financial resources in the Ministry of Health. In addition to the logistics, attitudes toward modern and traditional medicine are responsible for a reluctance to use modern medical facilities. In a society where traditional values have been so strongly emphasized, and where traditional medicine is very much part of the culture, people tend to see a traditional health practitioner before going to a clinic or hospital. While there are many areas in which traditional medicine is functional and quite adequate, its link with spiritualism allows it to point to a spiritual influence as the cause of an illness for which it has no medicine to treat. Thus, a flaring case of Gonorrhea may be attributed to the jealousy of a co-wife and an ailing appendix may be blamed on the displeasure of an ancestor.

Belief in a mystical causation of disease, which is still very common, leads to certain practices which are perported to afford protection from evil spiritual forces or forces of witchcraft. Most such practices are harmless in and of themselves, and they may be of psychological benefit to those who go through the rituals. They become cause for concern when they are detrimental to the health of the individual.

The harmful practices relevant to this study effect the children, once again. Depriving the child of colostrum, the watery fluid first secreted by the breast, is one that has already been discussed. The umbilical cord often has cow dung applied to the end, a practice which often causes Neo-natal Tetanus and kills hundreds of infants each year (personal interview, Maguire). The practice of giving regular enemas to babies, "to protect them from attack by malignant animals . . . " is another such practice (Kuper, 1961, p.167).* Certainly not essential to the health of the child, these enemas often cause severe gastric pain and may cause other problems by speeding up the movement of the stools through the large intestine.

I will now briefly outline the diseases which are most common in Swaziland. Most of this information comes from an interview with a nurse who worked in a rural Swazi clinic for several years.

Immunizations routinely given to children are as follows: one inoculation for tuberculosis, a series of three inoculations which protect against Diphtheria, Whooping Cough, Tetanus and Polio, and one inoculation for Measles. Less than 40% of children are completely vaccinated by one year of age (Swazi Observer, March 17, 1987). There are two reasons for this; the first being that mothers are afraid of the inoculations, since they often make the child slightly

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* "Babies receive an enema a few hours after birth and this is repeated daily up to the age of approximately two years" (Jones, p.86). Jones' study conducted in the 1960s found that all 270 mothers interviewed used enemata on their children. The practice may be less common today, but is certainly still widespread.

ill. Second, clinics are often a long distance from the family home and many clinics only vaccinate on certain days of the week. Most mothers would take their children to the clinic several times a year to be treated for illness, and immunizations should be done on those occasions. But if a mother has to make an extra trip to the clinic especially for the inoculation, she is unlikely to do so if she must travel a great distance. If the immunizations are given in a series of inoculations, mothers will often not complete the series (Swazi Observer, March 20, 1987), possibly because they believe one inoculation should be sufficient.

If Tuberculosis, a common disease, is treated by a traditional healer, the infected person will die within a few years. Even if the disease is properly diagnosed, treatment is so lengthy that people will often discontinue the treatment after the disease appears to have subsided. Whooping cough does occur, mostly in children less than six months of age. The disease cannot be cured, but must run its course. It is usually fatal for children of this age. Another common disease which can be prevented by immunization is Polio. While not usually fatal, it often leaves the victim partially paralyzed. Proper care for these people is extremely difficult in the homestead situation. Measles has already been mentioned as a killer of malnourished children. The disease will often lead to pneumonia or severe diarrhea and vomiting.

The prevalence of sexually transmitted disease is a serious problem in Swaziland. There are 50,000 people out of a population of 800,000 treated for these diseases each year (MCC newsletter), and

many more who go untreated. Women in particular may not know they have a disease, since the symptoms of both Gonorrhea and Syphilis eventually disappear while the disease is still active. If a woman has received treatment from a traditional healer, she may believe she is cured. Also, it was traditionally believed that venereal disease was not kept by the woman, but given to her by a man to be passed through her to other men (Kuper, 1947, p.79). Most often Gonorrhea will lead to a blockage of the fallopian tubes and prevent conception, but Syphilis is often passed to the child, who will die unless treated.

Most rural families do not have access to pure water; the contaminated water consumed is host to a number of disease-causing organisms. These organisms are either naturally present in the water or enter the water via human or animal feces (these diseases are also spread by flies, which carry particles of feces to the food). While most families know they should be purifying their water, there simply is not enough time or enough energy available to do so. Rivers, streams or springs supply 86% of rural families with water (de Vletter, p.27). To fetch water, most women have to walk for about one-half hour each way and most make this trip two or three times per day (Green, p.18). Even though a cholera epidemic afflicted the country in 1981, and people know that it spread through the water, 84% still never boil their water (Green, p.16).* In order to boil it, a great deal more firewood would have to be

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* Green noted that this is the kind of question to which people often give the 'right' answer to please the health department representative who was asking the questions. Nevertheless, the figure is high (Green, p.16).

collected by the woman, whose day is already too full. Half of the people Green surveyed also swam or bathed in natural bodies of water.

Water would be less likely to be contaminated, and the spread of disease by flies would be prevented, if all homesteads used a latrine. However, a survey conducted by Green in the early 1980s found that 70% of homesteads had no latrine and only 21% had a completed latrine (Green, p.23). The Ministry of Health, at this time, was trying to promote the construction of latrines by selling concrete slab seats and vent pipes to homesteads. However, many families ended by paying considerably more to have the latrine dug and built, since men were not present to do the work. Even those who do have latrines do not use them all the time. At least half of those who have them do not use them for urination (Green, p.70). Children under five years most often do not use them in any case; they use the bushes. Only 30% of families cover the childrens' waste or move it to the latrine (Green, p.34). Older people tended not to use the latrines because it was traditionally unacceptable to defecate 'in a house' (Green, p.38).

Hygienic disposal of refuse in a pit some distance from the kitchen, as well as periodic burning helps to decrease the number of flies around the homestead. Yet 60% of homesteads surveyed by de Vletter discarded their refuse in the surrounding bush (de Vletter, p.29). Reasons for not digging a pit for refuse are likely the same as those for not digging a latrine.

Of the diseases which are spread through unclean water, diarrhea is most common. As we have seen in the section on malnutrition, diarrhea can be devastating to children. Because diarrhea causes food to pass through the intestines extremely rapidly, very few of the nutrients are absorbed by the body. Diarrhea can thus increase the severity of malnutrition, and it can cause a healthy body to become malnourished. Diarrhea is most common among children between three months and three years of age and it tends to occur to these children frequently. "On any particular day about 5% of Swazi children are suffering from diarrhoea" (National Nutrition Survey, p.17). When the resulting dehydration becomes too severe, the child will die. Immediate treatment for rehydration can be provided by oral rehydration therapy, which replenishes lost fluid and salt. Incidences of death from diarrhea have decreased since the Ministry of Health has sponsored a large education program on with regard to the treatment of these children at home.

Cholera and Typhoid are water-borne diseases; Cholera occurs as epidemics and Typhoid is endemic. It is impractical to immunize against these diseases, since it must be done every six months; the only effective method of control is to purify water and improve hygiene. Polio is a water-borne disease, but it is one against which immunization can be carried out. Hepatitis, a disease of the liver, is also spread through water.

Bilharzia is caused by a parasite whose primary host is a tiny snail which lives in the water and the disease is extremely widespread in

Swaziland. It is present in most water, most of the time, and it is recycled through the water via the urine of an infected person (Green, p.70). People who drink unboiled water or those who swim or bathe in this water eventually get the disease. It can be successfully treated with modern medicine, but there is nothing to prevent the person from acquiring the disease again later. Its most obvious symptom is a lack of energy producing extreme lethargy.

Although they are not spread through water, parasitic worms infest a large proportion of the Swazi population. The cause of this infestation is a lack of hygiene or the consumption of undercooked meat in the case of tapeworm. Worms can produce a variety of symptoms. Some absorb nutrients, thus robbing the human host of its full level of nutrition; this is particularly serious among children. Some will cause respiratory infections if they reach the lung. An infestation of roundworms may lead to rheumatic heart disease. If a tapeworm reaches the brain, the host will die. Hookworms cause bleeding in the gut (personal interview, Maguire).

Although some of the infectious and parasitic diseases would have existed in traditional Swazi society, the changes in lifestyle that have made malnutrition a serious problem, and the new sedentary life with increasing population density, have certainly created serious health problems that did not exist with the same severity in traditonal society.

Other Aspects of Family Life

The Swazi family is no longer the cohesive social unit it once was. Many family members live away from the homestead, either working for wages or going to school. Often the head of the homestead is not present and women act as *de facto* heads, without the authority they need to fully perform this role.* Adequate nourishment is often not available. Division of labor is no longer functionally efficient on the homestead; the few who remain are often the least able to perform necessary tasks. The family is no longer able to sustain itself from the land; they now need cash to purchase what they cannot produce. And wages are most often insufficient to provide what is required. What was once a strong value structure has been eroded through the influx of a new culture and the absence of authority figures from the family.

Traditional clothing, although still an acceptable form of dress, has been virtually supplanted by Western-style clothing. Families must now purchase articles of clothing and frequently need to travel long distances to clothing retail outlets. Sewing machines are expensive and frequently a mechanical breakdown cannot be repaired at home. Sewing skills are only held by those who have been able to acquire instruction, but even those who know how to sew often cannot find patterns and are not usually able to make their own. Fabric is very

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* One example of this is the authority that the homestead holds over decisions of whether to send a family member to a hospital. Women are not allowed to make these decisions in the absence of their husbands, and consequently many people die when permission from the man does not arrive soon enough.

expensive as well. The acquisition of clothing has become one of the many drains on limited family financial resources.

Socially accepted modes of behavior are no longer strongly enforced. With the physical separation of families and with modern forms of education in place, traditional education has become less and less a part of family life. Responsibilities of family members are no longer clearly outlined; families just make the best of their particular situation. As it has become increasingly difficult for families to cope, many new problems have arisen.

Traditional mechanisms for controlling the birth rate have broken down; adolescent pregnancy is now common (Sachsenmeier, p.6) and the forces which prevented married women from having too many children have weakened. Artificial forms of birth control are not widely used, especially in the rural areas. Consequently, Swaziland has an extremely high fertility rate (3.3% in 1981) and a rapid rate of population growth (Sachsenmeier, p.6). The increase in sexual activity has also escalated the spread of sexually transmitted disease.

The level of frustration and the inability to cope with the rigors of life are manifested by widespread alcoholism and an increasing tendency to turn to traditional spiritual solutions to problems. Drinking of grain-fermented beer has always been part of Swazi culture, but, now, commercially brewed products with a higher alcoholic content are available, and there is currently a widespread abuse of alcohol. Traditionally, frustration with inexplicable

phenomena would be dealt with by consulting a diviner who would be able to get in touch with the spiritual realm to discover the source of the problems. In very rare instances a diviner would resort to a ritual which required certain human body parts. Cases of ritual murder have become more frequent as the number of problems people experience increase in number and severity. Several times a year Swazi newspapers report new cases of ritual murder.

D. Conclusion

While the life of the traditional family provided better health and social stability, the attempt by the ruling class to maintain tradition is not a realistic solution to the many ills of the modern family. Society has changed and traditional ways do not provide means with which to cope with these changes. It is foolish to assume that the family can continue to function with the male authority figure when the male is most often absent from the homestead. A continued reliance on traditional medicine will not cure the escalating cases of disease caused by poverty. To expect production on the homestead to continue to provide for the family's needs is bizarre given the drain of homestead labor to wage labor. And to allow these wages to remain so low while corporations continue to profit is criminal. What the Swazi family needs is support from the state to adapt to the changing society, not pressure to blindly adhere to tradition, which constitutes the assistance that the state currently provides to the family.

CHAPTER 6
DATA ANALYSIS

A. Introduction

The categories into which the data was organized, were determined for the most part, by the topics which made up the curriculum. Initially, student respondents were asked to give some descriptive information about their home situation. Following this, they were asked questions on each topic which the curriculum addressed; questions which determined their attitude toward the substance of these topics, and wherever possible, toward their behavior related to these topics. Although the intention was to compare the attitudes and behaviors of the two groups--those just beginning the program and those who have completed it--the latter group was questioned wherever possible on the ways they as individuals had changed. This group was also asked to give information on whether they had tried to change attitudes and behaviors of members of their families and if so, what the response had been.

Teachers commented specifically on some of these topics, but from the perspective of how well they were able to teach them. Teachers' comments were divided into concerns and contextual factors. Headmasters' comments were incorporated into this system of categorization.

B. Home Situation Descriptors

Asking the respondents to talk about their homes served two purposes: first it served as an ice-breaker by getting the student to talk about something simple and to begin talking to me on a personal level, and second it provided me with information about the home lives of the respondents so that I could compare them with the norm. The students were asked to tell me about the home they stayed at when they were not attending school, since many of them lived in boarding hostels or stayed with other people when they attended school. In approximately half of the situations (15 out of 24), students were living with their fathers, most often in one of the towns which was sampled and where their fathers worked. Just over one-third of the students interviewed (13 out of 27) indicated that their home was in a town, but in three of these cases the family also had a homestead. About half (seven out of 13) of the students with homes in rural areas had men living there permanently--the remainder (six out of 13) lived with mothers or grandmothers. Half of the students who were asked, were living at home while attending school (11 out of 22) and the other half were not (11 out of 22).

This sample included a higher proportion of urban residents than is found in the country's population,* which explains why a high proportion of adult males were living at the respondents' homes. The rural sample had approximately half of the fathers living at

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* The proportion of the population which resided in urban areas in 1984 was 15% (Swaziland Annual Statistical Bulletin, 1984, p.11).

home, which is fairly close to the norm where slightly more than half of the adult males were absent from the homestead (de Vletter, p.17).

The number of children living at the homes of the respondents ranged from one to 16, with a heavier distribution ranging between three and seven (see Table 2). This only indicated the number of children at home, and not necessarily the number of siblings the respondent had. Some siblings resided permanently somewhere other than the respondent's home and some would be old enough to have moved away or be considered part of the adult population of the homestead. In any case, the sample is representative of the norm--the national average for resident population on a homestead is eight (de Vletter, p.17).

Table 2

Number of Children at Respondents' Homes

# of children	frequency of response
1	2
2	1
3	4
4	5
6	2
7	4
8	2
9	2
10	2
16	1

total responses - 25

average - 5.8 children

In less than half the home situations (11 out of 27) was a family member living at home and working for wages. In half of the cases (12 out of 27), some family members were working away from home and visiting periodically. This does not necessarily mean these visitors were contributing financially to the operation of the homestead; one respondent mentioned specifically that the father brought home no money because he was supporting other wives. Some of the homes, therefore, were living purely on subsistence and several respondents (five out of 27) indicated that some of their agricultural produce was sold for cash.

This description of the home situations of this sample of students, a sample which was not intended to be a random sample in the scientific sense, gives us a picture which corresponds quite well with the norm for the country.

C. Health and Hygiene

In general, there was an enthusiastic response by students and teachers to the topic of hygiene being included in the curriculum. Two of the nine teachers commented on this section being one of the most important in the course, due to the practical benefits it could have for the students. Two teachers also remarked that students enjoyed studying the topics, and this was verified by students' comments. Respondents from Group 2, who had completed the

course, responded positively, with two of them indicating that it was one of the most useful parts of the course.

Students often gave information about hygiene-related topics when asked the general questions of what they had learned, what they had changed or what they had talked to family members about. Often the responses were very detailed. Behavior changes which students reported were: washing dishes promptly (two responses) and using soap to wash them (one response), washing vegetables (four responses), keeping the yard clean (two responses), having a rubbish bin in the kitchen (one response), brushing teeth (one response) and washing hands after using the toilet (one response). Some respondents from group 2 (five out of 16) indicated they had spoken to others at home about making these changes and had met with a positive response. Several group 1 respondents (five out of 11) mentioned hygiene-related topics as reasons that they had taken the course.

1. Water

Many students in group 1 did not have a good knowledge of water hygiene. Many indicated that river water was not sterile, and they knew of reasons why this was the case (see Table 3). They realized that urine and feces were washed into river water by the rain (two responses), and that cows went into rivers (one response) and people washed in the rivers (one response) and for these reasons the water

was not clean. There were a few respondents, however, who had mistaken ideas about the cleanliness of river water; one indicated that some river water was clean and some was not, and another assumed that the water which came to her home was clean--water which was simply re-routed from a river. Several students believed that water which came into the towns was clean, two of the respondents indicating that the reason for this was that some substance was put in the water to purify it.* A few students indicated that water which they had in tanks was clean because such a substance was put in the water. One respondent expressed the belief that any tap water was pure, which is incorrect since there are some stand-pipes in rural areas which pump water from impure sources. There were several respondents from this group who expressed the belief that they could tell that water was clean by looking at it. Thus about half of the respondents held incorrect beliefs about which water sources were hygienic. In spite of this, most respondents (8 out of 9) did know how to purify unclean water.

Table 3

Knowledge of Pure Sources of Water--Group 1

Response	Frequency of Response
river water is not clean	4
can tell by looking at water	3
town water is clean	3
tap water is clean	2
water from rain tank is clean	2
total responses - 9	

* All towns in the country do chlorinate their water supplies.

When asked about the effects of drinking impure water, respondents commonly identified the water-borne diseases Bilharzia and Cholera, but others were not identified (see Table 4). Only two respondents mentioned that diarrhea could be caused this way. Two comments spoke of general illness and two gave the incorrect answers of weak joints and Malaria being results of consuming contaminated water.

Table 4

Knowledge of Effects of Drinking Impure Water--Group 1

Response	Frequency of Response
Cholera	6
Bilharzia	5
'illness'	2
Diarrhea	2
Malaria	1
weak joints	1
don't know	1

total responses - 9

There is a widespread knowledge about Cholera and the way in which it is spread, because the disease comes in epidemics which kill large numbers of people in short periods of time. The last epidemic occurred early in this decade, so these students would have a vivid memory of it. Bilharzia is very common and always present; virtually all Swazis know the way this disease is transmitted.

Respondents from group 2 had a better knowledge about hygienic water, but still there were several respondents who had incorrect

notions (see Table 5). Many respondents noted that river water was impure because people (three responses) and animals (one response) went into this water. However, one respondent suggested that water from small rivers was acceptable and another believed that as long as the water was running, it was alright. Other incorrect responses were similar to those from group 1: that one can tell if water is pure by looking at it, that all tap water is clean, and that all spring and well water is pure because it comes from underground. Seven respondents volunteered correct information on how to purify water, but several (four) indicated that they did not do so in their homes.

Table 5

Knowledge of Pure Sources of Water--Group 2

Response	Frequency of Response	
river water is not clean		7
tap water is clean		4
spring and well water is clean		2
water from rain tank is clean		2
should boil all water	2	
can tell by looking at water	1	
town water is clean	1	
river water is clean	1	
small river is clean	1	
dam water is not clean		1

total responses - 14

There was a slightly more comprehensive knowledge among this group about the results of consuming contaminated water, but the majority mentioned only Cholera and Bilharzia (see Table 6). Many

students listed gastro-intestinal problems and three respondents indicated that worms could be a result.

Table 6

Knowledge of Effects of Drinking Impure Water--Group 2

Response	Frequency of Response
Cholera	7
Bilharzia	6
Diarrhea	4
'disease'	4
Stomach Ache	3
worms	3
Vomitting	2
skin diseases	1

total responses - 14

2. Flies

Group 1 was generally aware that flies carry contaminants to food and cause illness by doing this (see Table 7). Responses were simple. Cholera, once again, was mentioned most frequently as an illness that could be caused by a lack of hygiene. A few other illnesses were mentioned, and the general terms of "illnesses" or "diseases" were used when respondents could not name specific diseases.

Table 7

Knowledge of Illnesses Caused by Flies--Group 1

Response	Frequency of Response	
Cholera		5
Typhoid		2
'illness'	2	
Diarrhea		1
TB	1	
Whooping Cough	1	

total responses - 8

The most common solutions of how to avoid attracting flies were to keep the home clean, to cover food, to use insecticide sprays and to have a toilet that should be covered and cleaned (see Table 8). One respondent suggested that the cattle byre should be far from the home and two said flies could be killed when they entered the home.

Table 8

Knowledge of How to Avoid Attracting Flies--Group 1

Response	Frequency of Response	
keep home clean		6
have a pit latrine		5
cover food	4	
use insecticide spray	4	
cover latrine hole		2
keep latrine clean		2
kill flies	2	
keep kitchen clean	1	
cattle byre far from home	1	

total responses - 9

Respondents were also questioned on how they thought rubbish and human waste should be dealt with, without any specific reference to flies in the questioning. Group 1 agreed that rubbish should be disposed of in a pit (see Table 9), many indicating that it should be far from the homestead and that the contents should be burned periodically. Four respondents indicated that this would help keep the flies away. Two suggested that rubbish inside the home should be kept in a container rather than discarded on the floor and swept up later. There was a general agreement that each homestead should have a pit latrine (seven out of seven responses) and two respondents indicated that this would avoid attracting flies. Two respondents mentioned that the latrine should be covered.

Table 9

Attitudes Toward Rubbish Disposal--Group 1

Response	Frequency of Response
have a rubbish pit	7
pit should be far from home	6
rubbish should be burned periodically	5
have a rubbish container in house	2
deposit rubbish in forest	1

total responses - 8

Respondents in group 2 were able to elaborate in greater detail on the important aspects of hygiene related to flies (see Table 10). This group was also aware that flies carried contaminating substances to food which could subsequently cause illness, and four of them also

mentioned that Cholera was one of those illnesses. Many of the respondents identified gastro-intestinal illness, but there was not a general awareness that this type of illness was caused by flies.

Table 10

Knowledge of Illnesses Caused by Flies--Group 2

Response	Frequency of Response
Diarrhea	5
Cholera	4
Vomiting	3
Stomach Ache	3
Headache	2
Malaria	1
TB	1
'illness'	1

total responses - 9

Most respondents in this group suggested that food should be covered to avoid flies (see Table 11), and two of these girls indicated that they had started to cover their food after learning of its importance. All 16 respondents suggested that keeping the home cleaner helped to keep flies away, with such practices as washing dirty dishes immediately (five responses) and throwing away rotten food (three responses) being important. Three respondents said that they now kept their homes cleaner and one said that at her home, they had started washing dishes right after the meal rather than leaving them overnight. Many respondents from this group noted that the common practice of locating the cattle byre close to the

kitchen would attract flies; two respondents indicated that they had been instrumental in having the cattle byres moved further away from the home.* Many respondents in this group also suggested that spraying with an insecticide would keep flies away from the home, with one respondent expressing the concern that it not be sprayed close to food.

Table 11

Knowledge of How to Avoid Flies--Group 2

Response	Frequency of Response
keep home clean	16
cover food	13
use insecticide spray	7
keep cattle byre far from home	5
have a rubbish pit	2
make a pit latrine	1

total responses - 16

Attitudes toward the importance of having a rubbish pit far from the home and of burning the contents were similar to those of group 1 (see Table 12). A few respondents in this group (three out of 16) also noted that this practice would avoid attracting flies. Many of the respondents (six out of 16) in group 2 indicated that it was important to use a rubbish container inside the home and two noted that the container should be covered. Two respondents indicated that they

* All of the behavior changes noted in this chapter were changes which respondents reported to have made as a result of taking this Home Economics course.

had changed their rubbish disposal practices--one said that they did not leave rubbish lying around any longer and another had asked her brothers to dig a pit for rubbish.

Table 12

Attitudes Toward Rubbish Disposal--Group 2

Response	Frequency of Response
have a rubbish pit	9
pit should be far from home	9
rubbish should be burned periodically	7
have a rubbish container in house	5
cover the rubbish container	2

total responses - 9

Group 2 respondents held similar views to group 1 on the importance of having a pit latrine. All 11 responses indicated that a pit latrine was necessary. There were two respondents who suggested that having a proper latrine would avoid attracting flies which would then contaminate food and cause illness. One respondent said that it was important to have a latrine so that human waste would not be washed into the river, where it may contaminate the water. Three respondents reported that after learning about latrines in home economics, they had influenced family members to build one at their homes. One respondent said that even though other members of her class had suggested it be done at their homes, she did not because she would have had to dig the pit herself and it was too difficult a

job for her. Another respondent said she had told her sisters that they must wash their hands after using the toilet.

3. First Aid

Student respondents expressed an interest in learning about first aid, one of the new topics included in this curriculum. Those from group 1 indicated that they would like to learn more about the topic (all four respondents who were asked) and those from group 2 found the topic of practical use to them (seven out of seven who were asked), many of these responding in an enthusiastic manner about the benefits of learning first aid. In order to discover how much these respondents knew about first aid, they were asked what the proper treatment was for two of the following: a cut, poisoning, a burn or a broken leg. Knowledge of correct treatments for these was inadequate and there was no significant difference in the levels of awareness of the two groups. Respondents from group 1 showed a minimal knowledge of the correct treatments for a burn, in most cases suggesting an incorrect method of treatment (five out of seven responses). A number of respondents (three out of seven) suggested that a burn should be cleaned with soap and/or covered with a bandage (three out of seven). Although two suggested the correct treatment of cooling the area with cold water or ice, one respondent combined these with other incorrect treatments. Group 2 responses to the burn treatment were not much different from those of group 1; only one respondent described a correct treatment. Three

respondents (out of six) suggested the burn should be washed and two thought it should be bandaged.

Student respondents were asked to describe how they would treat a child who had swallowed a poisonous substance of the category which burns the esophagus and therefore vomiting should not be induced. No respondent from group 1 (out of a total of five) was able to describe the correct treatment of giving the victim large quantities of milk to drink, followed by a visit to a clinic or hospital. One respondent thought vomiting should be induced and all of the others did not know of any home treatment for the poisoning. All of group 1 respondents believed the child should be taken to a clinic or hospital. Most respondents from group 2 who were asked this question (four out of six) knew the correct treatment, but one believed vomiting should be induced and another did not know of a home treatment.

All of those from group 1 who were asked how they would treat a cut (a total of six) , believed the cut should be bandaged, but only one respondent described the correct method of cleaning the wound before bandaging it. One thought a rinse with water was enough and three others did not mention cleaning at all, but thought an application of a medicated ointment would suffice. One respondent did not mention any cleaning of the wound. Responses from group 2 (a total of six) were similar; no respondents described the correct method of washing the wound, two thought a water rinse was enough and the remainder did not describe any means of cleaning

the wound. All of these respondents did describe a method of bandaging the wound.

Respondents' descriptions of how to treat a person with a broken leg were inadequate (a total of two respondents from group 1, and seven from group 2 were asked this question). All respondents from group 1, and all but one respondent from group 2 were aware that the victim needed to be taken to a modern medical establishment, but not one respondent from either group was able to describe the correct method of immobilizing the leg during transportation. Three respondents from group 2 suggested methods of treating the leg before transportation which may have worsened the seriousness of the injury.

D. Nutrition

When asked to give examples of healthy meals, half of group 1 (four out of nine) could not do so. In all cases the problem was a failure to include a fruit or vegetable. Several students listed meals that included too much carbohydrate in the form of starchy foods.

Most of the students from group 2 (11 out of 14) were able to express what a balanced diet is, and to give examples of balanced meals. Five respondents indicated a change in behavior here; efforts were now being made in their homes to prepare meals that were more balanced. One respondent thought that learning about

nutrition to enable her to prepare balanced meals was one of the most important aspects of the course. One student did indicate that no change had been made at her home because there was not enough money to buy fruits and vegetables.

1. Maize

While the majority of group 1 respondents (seven out of 11) believed that unrefined maize was more nutritious, the remainder (four out of 11) thought the opposite was true. Those who answered correctly were not able to explain why the unrefined variety was more healthy. Only one respondent from group 2 (one out of 14) believed refined maize to be more nutritious. Respondents were able to explain that the substances lost in the refining process contained roughage (five responses) which aided proper digestion (two responses) and also contained some important nutrients (five responses). The one respondent who favored the refined product said that at her home fertilizer could not be afforded and maize therefore did not grow well. Thus it was only less nutritious because there was not enough of it.

Respondents from both groups (six out of seven from group 1, and 13 out of 14 from group 2) were aware that maize porridge alone did not constitute a balanced, healthy meal. This question was asked because it is common to consume an acid-soured maize porridge for

meals. Eight respondents from group 2 were able to suggest foods that could be consumed with sour porridge to make a balanced meal.

Since it is also common to prepare maize porridge with a vegetable stew, respondents were asked whether they thought this meal was balanced. All of the group 1 respondents (eight out of eight) and a few from group 2 (three out of nine) believed that it was. All respondents from the latter group who thought the meal was not balanced were able to suggest ways to improve it.

Packaged, powdered soup often serves as a base for the stew, and in many cases when nothing is available to mix with it, it alone accompanies maize porridge. Students were therefore asked whether they believed this soup to be healthy. About half of group 1 (five out of nine) and many from group 2 (five out of 12) thought that it was healthy. There was a common belief among those who thought the soup was healthy that soups advertised as beef or chicken soup, for example, contained protein and that vegetable soup contained vegetables. Respondents from group 2 who believed the soup was not healthy were aware that there were not substantial amounts of these meats and vegetables in the soups.

2. *Protein*

Respondents from group 1 did not have a clear idea of which foods contained protein. When questioned about specific sources of protein

and how often these should be eaten, the responses were consistently low. It is very likely that the answers simply reflected the practices of the respondent's family. Group 2 respondents were well aware of which foods were good sources of protein and although their ideas of protein requirements were higher than those of group 1, they were still low. There was a general feeling that a serving of protein every few days was enough. Although the stated requirements for milk were more frequent, never was it more often than once a day.

Respondents from group 1 were not able to comment on the varying needs of different population groups, but group 2 was able to make some comments (see Table 13). Respondents from this group were generally able to recognize that children had increased needs for protein because of their rapid growth rates. However, the needs of the pregnant and lactating woman were generally not recognized by this group, and some respondents believed, incorrectly, that adult men needed the most protein.

Table 13

Attitudes on Which Population Groups Need the Most Protein

Group 2

Response	Frequency of Response
children	6
babies	4
father	3
old people	2
adolescents	1
expectant mother	1
lactating mother	1
everyone needs same	1

total responses - 9

3. *Fruits and Vegetables*

When asked about the frequency with which vegetables should be consumed, half of group 1 (four out of eight) believed they were needed daily. The remainder either did not know (one response), or they thought vegetables were needed less often (three responses). Two respondents thought that twice a week was often enough. Cabbage was most frequently suggested as the healthiest vegetable (see Table 14); spinach, carrots, lettuce, beetroot, beans and tomatos were ranked as very healthy. No respondents mentioned pumpkin or wild vegetables when asked the general question of which vegetables are most healthy, but when asked specifically about wild

greens, all respondents (eight out of eight) agreed that they were healthy vegetables.

Table 14

Attitude Towards Which Vegetables are Most Healthy--Group 1

Response	Frequency of Response
cabbage	6
spinach	4
beetroot	3
beans	3
tomatos	3
lettuce	3
carrots	3
potatoes	1
peas	1
onions	1

total responses - 9

Responses from group 2 to questions about vegetables were almost identical (see Table 15). Even fewer respondents from this group (three out of seven) believed vegetables should be eaten daily; most respondents (four out of seven) thought that a few times a week was enough. Cabbage and spinach were ranked as the healthiest vegetables; with potatoes, beetroot, tomatos and carrots mentioned as being very healthy. Once again, pumpkin and wild greens were never listed in responses to the general question, but it was agreed that wild greens were healthy when the more specific question was asked (nine out of nine responses).

Table 15

Attitudes Towards Which Vegetables are Most Healthy--Group 2

Response	Frequency of Response
cabbage	8
spinach	8
potatoes	4
carrots	4
beetroot	3
tomatos	3
onions	1
pumpkin leaves	1
lentils	1
peas	1
groundnuts	1
beans	1
legumes	1

total responses - 11

When asked whether vegetables were more nutritious when eaten raw, group 1 had two respondents agreeing, one disagreeing and three stating that there was no difference. Respondents who agreed that raw vegetables were better could not give a reason why they believed this; the respondent who indicated that cooking them was better thought that the cooking process would destroy substances on the vegetables which may cause illness.

There was a marked change in responses from the second group. Most respondents (six out of nine) agreed that raw vegetables were more nutritious, and four of them were able to explain that nutrients were lost in the cooking process. Two respondents expressed the

opinion that cooking vegetables would kill unhealthy substances on the vegetables. One respondent thought that cooking vegetables was better because one needed mayonnaise to make a salad and because mayonnaise is expensive; therefore, when they made salads at home each person was only given a small portion.

Group 1 attitudes on the frequency with which fruit is needed corresponded with their attitudes about vegetables; approximately half (four out of seven) thought that fruit should be eaten daily and the remainder believed a few times per week was enough. One respondent commented that buying fruit was seen as a waste of money and that fruit was normally only eaten when people were at their homestead where fruit was grown. Respondents consistently mentioned oranges or other citrus fruit as the most healthy fruit (see Table 16); apples, mangoes and bananas were believed to be nutritious by a few respondents. Wild fruits were never mentioned and guavas and paw paws (papayas) were only listed once each. Avocadoes were not listed as a healthy fruit, and when asked specifically about them, some thought they were healthy and some were not sure.

Table 16

Attitudes Towards Which Fruits are Most Healthy--Group 1

Response	Frequency of Response
oranges	7
other citrus	4
apples	3
mangoes	2
bananas	2
guavas	2
peaches	1
paw paw	1
total responses - 9	

A larger proportion of group 2 (four out of six) thought that fruit should be consumed daily and one respondent believed they were needed twice a day. Again one respondent indicated that when she was away from her homestead, she did not eat fruit very often because she had to buy it. Oranges and other citrus fruits were overwhelmingly selected as the most healthy fruit (see Table 17), with most respondents indicating that citrus fruits were best because of their high concentration of vitamin C. Very few other fruits of any sort were mentioned, but almost all respondents who were asked specifically about avocadoes thought that this fruit was healthy. Most responses did not indicate a knowledge of the nutrients found in an avocado.

Table 17

Attitudes Towards Which Fruits are Most Healthy--Group 2

Response	Frequency of Response	
oranges	9	
other citrus		6
apples	2	
mangoes	1	
paw paws	1	
peaches	1	
plums	1	
bananas	1	

total responses - 11

4. Malnutrition

Most respondents in group 1 (five out of eight) reported that they had never seen a malnourished child, but that they had heard of a case. The remaining three respondents had seen a child suffering from malnutrition. Respondents were well able to identify the distinguishing characteristics of the malnourished child (see Table 18): a loss of color in the hair, a large belly and the thinness of the rest of the body.

Table 18

Knowledge of Distinguishing Characteristics of Malnourished Children

Group 1

Response	Frequency of Response	
large belly		7
discolored hair	6	
rest of body thin		5
not happy	1	
small buttocks	1	
eyes protrude	1	
no visible characteristics	1	

total responses - 9

Half of those respondents who were asked their thoughts on the prevalence of malnutrition among Swazi children (three out of six) thought there were not very many cases; the remainder either did not know (one response) or believed that there were many (two responses). This group of respondents was able to explain the reasons that children were malnourished (see Table 19): the children did not get enough food or not enough of the right kinds of food. A few students (three) were more specific, stating that these children were given too much starch and not enough protein. Several respondents thought that the reason for this was a shortage of money in the family. Others suggested that children may get insufficient food due to the ignorance of an uneducated mother or a short breast-feeding period when the mother becomes pregnant again.

Table 19

Attitudes Towards Causes of Malnutrition--Group 1

Response	Frequency of Response
not enough food	4
not enough of right kinds of food	4
not enough money	4
ignorance of mother	1
mother becomes pregnant	1
don't know the cause	1

total responses - 11

More than half of group 2 (ten out of 16) indicated they had seen a malnourished child; others had not (two) or had only seen pictures (four). Thoughts on the prevalence of malnutrition among Swazi children were the same as those of the first group; about half (four out of ten) thought there were many cases in the country and half (five out of ten) did not. Respondents from this group were as able as those from group 1 to identify the visible characteristics of a malnourished child (see Table 20). A few of them also mentioned the skin being affected, which is another symptom.

Table 20

Knowledge of Distinguishing Characteristics of Malnourished Children

Group 2

Response	Frequency of Response	
discolored hair	8	
large belly		8
rest of body thin		6
not happy	3	
skin problems	3	
face swollen	1	
great appetite	1	
eyes not good	1	
small buttocks	1	
ribs showing	1	
retarded growth		1

total responses - 12

Comments on the causes of malnutrition by respondents from group 2 were more elaborate than those from group 1. Many respondents identified the cause of Kwashiorkor as a deficiency of protein, but many also said simply that the child gets the wrong kind of food. More respondents from this group identified ignorance as the reason parents did not feed their children properly, but many also pointed to poverty (see Table 21). One respondent suggested that the child may suffer because the mother is unable to get to a clinic, possibly because the father believes in old customs and refuses to allow her to go.

Table 21

Attitudes Toward Causes of Malnutrition--Group 2

Response	Frequency of Response
ignorance of parents	5
protein deficiency	4
not enough of right kinds of food	4
not enough money	4
carelessness of parents	1
mother unable to get to clinic	1
not enough food	1
mother becomes pregnant	1

total responses - 15

No respondent identified growth stunting when questioned about malnutrition, so this was pursued separately. Several respondents from group 1 (three out of seven) were able to state that a child who had stopped growing was not getting enough food, but many (four out of seven) did not know why this might happen. The majority of group 2 (nine out of 14) knew that it was some problem associated with incorrect feeding and many (seven) mentioned protein specifically or that the child must be suffering from Kwashiorkor or Marasmus (two responses). One respondent from group 2 suggested the stunting may result when the mother becomes pregnant again. The three respondents from group 1 who were asked how a mother would know whether a child had stopped growing or not, said that the mother would be able to tell on her own without having the child weighed. Three out of nine group 2 respondents suggested that the mother would know by having the child weighed at the clinic; but

the remainder suggested only subjective means of detecting stunted growth such as apathy (two responses), unhappiness or illness in the child (one response), failure to develop walking skills (one response) or just a sense on the part of the mother that the child had stopped growing (two responses).

Since Pellagra is the most common nutritional deficiency disease found among adults, respondents were questioned about the cause of skin sores, the major symptom of Pellagra. Only one respondent from group 1 (out of eight responses) identified a food deficiency as a possible cause, the remainder did not know (two responses) or suggested only physical injury or insect bites (four responses). Many respondents from group 2 (six out of 11) identified nutritional deficiency as a cause of skin sores but the specific deficiency (niacin) was not identified by any respondent. Answers either pointed to a general deficiency (four responses) or to a deficiency of another nutrient (two responses).

5. Cooking

Cooking was by far the most popular part of the course; every respondent from group 1 (11 responses) mentioned cooking as a reason for taking the course. Most respondents from group 2 (12 out of 16) thought learning to cook was the most or one of the most valuable aspects of the course. All respondents reported that they did some of the cooking at home and some from both groups (four

out of 11 from group 1, and three out of 16 from group 2) said that they did most or all of the cooking. Group 1 was simply asked what kind of dishes they prepared at home, whereas group 2 was questioned on how well they were able to apply what they had learned about cooking. Group 1 reported making simple dishes--with porridge, rice, meat stew and vegetable dishes composing the majority of responses (see Table 22). Some respondents indicated that they prepared dishes with beans or groundnuts. Several respondents had done some baking.

Table 22

Dishes Which Respondents Prepared at Home--Group 1

Response	Frequency of Response
vegetables	16
porridge	9
meat stew	9
rice	7
legumes	4
cakes	4
salad	3
soup	3
scones	3
sour porridge	2
chicken	1
fish	1
gravy	1
puddings	1
jelly	1

total responses - 11

Firstly, group 2 was asked to list the dishes they had learned to prepare in class that they were able to prepare at home. The responses included more elaborate dishes than those reported by the first group (see Table 23). The largest category of responses included baked items--scones, cakes and bread. Some indicated that they could prepare these baked goods over an open fire. Many respondents reported preparing meat or chicken dishes that they had learned to make in class, and several mentioned vegetable dishes or salads.

Table 23

Dishes Prepared at Home which were Learned in Class--Group 2

Response	Frequency of Response
baked products	15
meat/chicken dishes	9
fruit drinks and salads	6
vegetables	6
salads	5
maize products	2
rice/rice dishes	2
puddings	2
pasta dishes	1
gravy	1

total responses - 16

Most dishes that respondents were not able to prepare at home fell into two categories: those that the respondents did not care for (four out of 14 responses) and those for which they did not have or could not afford the required ingredients (six out of 14 responses). Most

often the latter category included cakes which required expensive ingredients. Other dishes which were not prepared at home utilized oil for deep fat frying, pasta, minced (ground) meat and cheese.

Twelve of the 16 group 2 respondents reported having made changes in the way they prepared food, and almost all of these (nine responses) concerned vegetable preparation. They indicated that they had stopped overcooking vegetables in order to preserve vitamins which were lost in the cooking process, with one respondent referring specifically to vitamin C. One respondent indicated that she now used water in which vegetables had been cooked, to prepare soup or gravy. Two respondents indicated that they had showed people at home how to prepare new dishes.

Many of the teachers (five out of nine) commented on the cookery section of the course but there were no commonalities among the responses. One teacher found that her students enjoyed this section very much; another believed it was one of the most important aspects of the course. One teacher was unhappy that the new syllabus did not suggest specific dishes to be prepared in class, as the previous one had. Two other teachers had comments more specific to the kinds of dishes, the preparation of which should be taught; one thought it was very important to teach outdoor baking and the other believed traditional dishes did not need the increased emphasis they received in the new curriculum, since she believed they were no longer of practical use.

E. Family Living

Teachers were universally uncomfortable with teaching the more sensitive areas of this section; in particular the areas dealing with growing up, selection of a mate, marriage and pregnancy. Most teachers reacted to these topics in a nearly hostile manner, questioning the reason for them being in the syllabus, with two teachers saying that these topics should be removed. Two teachers expressed a lack of confidence in teaching this area and two others indicated that they were unsure of what they were expected to cover. The subjects are of such a personal nature that one teacher admitted she was embarrassed to talk about them in class. Two teachers thought it was too early in the students' lives for them to be learning such things; one teacher thought the material should be taught elsewhere. Another teacher expressed the view that talking so much about pregnancy to students just encourages them to become pregnant. Several teachers (four) indicated that the students did not respond well to the topics--they were bored with them or they did not see the reason for them being discussed in school.

Group 2 respondents were asked a general question on what they had learned in the family living section. One respondent (out of 11) from this group did not remember what she had learned in the section, but most respondents noted that they had learned about the types of marriage (6 out of 11) and the types of families (four out of 11) that exist in Swaziland. Almost all responses were simply a list of these different types. There were two comments about the

extended family having many children and not enough resources to support all these children. A few (three out of 11) respondents noted that they had learned something about roles and responsibilities of family members and one other mentioned some aspects of money management. One respondent remembered learning about the problems experienced by the adolescent. Comments on the usefulness of this part of the course indicated mixed feelings among the group. Two respondents said that they had found the section minimally interesting and two others thought it was very interesting; one respondent indicated that it was one of the most useful aspects of the course due to its practical value.

1. Money Management

Students and former students were not questioned specifically on this topic, but as already mentioned only a few noted this topic as something they had learned in Family Living. Many teachers (six out of nine) made comment on the topic, since it was one of the new sections of the curriculum. They all felt the topic was useful, since most students had no idea of how to bank or handle money and two teachers felt that students needed some guidance in setting priorities for spending money in the home. However, two teachers felt that students were not interested. One teacher suggested that teaching the topic may be easier if they were given some ideas on how to approach it.

2. Menstruation

Several teachers (three out of nine) gave emphatically favorable comments on this section of the course. They felt that students were not adequately informed at home about menstruation and sanitary protection. Students had shown a keen interest when the topic was discussed in the classroom; it had tremendous practical value for them. Students in group 1 were simply asked whether they knew what menstruation was. Most (four out of six) indicated that they did not know and the few that did know (two out of six) said that they had heard about menstruation from people other than their parents. It is likely that most of these respondents did know about menstruation, but did not know the English terminology and/or were too embarrassed to discuss it with me. I did not press them for any more information than they felt comfortable giving me.

Two group 2 respondents specifically expressed appreciation that they had received some instruction concerning menstruation in home economics. Some (three out of nine) indicated that they had known about menstruation before and others (five out of nine) said they learned about it for the first time in this course. It was the information about the use and disposal of sanitary protection that most students (six out of nine) did not know about previous to taking home economics. Three respondents indicated that they had made changes in their behavior in this area and one had discussed proper disposal of sanitary protection with female family members.

3. Birth Control

Many group 1 respondents (four out of nine) did not know how to prevent pregnancy; the remainder knew that birth control could be acquired through modern medical establishments or the Family Life Association.* One respondent suggested that an agreement with the husband would prevent pregnancy. Group 2 was more well informed about where one could acquire birth control and about the different types available. Only one respondent (out of 13) said she did not know how to prevent pregnancy. Many respondents (six out of 13) mentioned the Family Life Association as a source of birth control and others (four out of 13) suggested that it could be acquired at clinics and hospitals.

4. Venereal Disease

Student and former student respondents were questioned about whether they knew what venereal disease was and if so, whether they knew about what would happen to a woman who had a venereal disease and did not treat it. Only one respondent from group 1 (out of six respondents) knew about VD and she was unable to give any further information. A very different level of awareness existed among group 2 respondents; all but one (out of ten respondents) knew about VD. Many (four out of nine), however, did

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* This organization provides resources and information to people seeking information on birth control and other family related matters.

not know about the effects of not treating such a disease. Two respondents thought the disease could be transferred to the child if the woman was pregnant and one believed the woman may become sterile. One teacher commented on the inclusion of a discussion of VD in home economics; she thought it was extremely valuable for the students since she knew that many girls had the disease but were not aware of it.

5. Child Bearing

Respondents from both groups were questioned on their attitudes toward age of child bearing, spacing of children and the number of children they wished to have. In both groups the respondents thought the best age to begin bearing children ranged from 21 to 30 years. Most group 1 respondents (four out of ten) thought that 25 years was best; the majority of group 2 believed that either 21 years (four responses out of 15) or 25 years (four responses out of 15) was the ideal age. Most respondents from both groups believed that two or three years between children was the ideal length of time (six out of ten responses from group 1, and 11 out of 16 responses from group 2), and the range or responses was from one to seven years in both groups. Explanations given by group 1 respondents were fairly uniform; they all believed the first child needed to be well taken care of for this period of time and that the birth of a second child would necessitate most of the mother's care going to the young child with the older one possibly being neglected.

Group 2 explanations echoed the same reasoning, with two respondents referring specifically to the importance of breast-feeding the first child for an adequate period of time. Thus they believed the first child may suffer nutritionally if the mother became pregnant too soon. One respondent from group 2 thought that a short spacing period may be detrimental to the mother's health.

Attitudes toward the ideal number of children were also similar. The majority of respondents in both groups (five out of 11 from group 1, and six out of 15 from group 2) believed that four children was an ideal family size and the responses ranged in both cases from two to four children. A similar proportion of respondents from both groups believed that less than four children was ideal (five out of 11 from group 1, and eight out of 15 from group 2). All respondents believed that it was very important to be able to properly support one's children; to provide them with adequate food, clothing and education. Those from group 1 who believed four children was an ideal number, thought that one must have at least four in case one or more of them would not survive. Only one respondent from group 2 expressed this concern; most of these respondents (five of them) were more concerned that there would be enough children around the homestead to help with the work. This applied to the time period during which they were growing up, but moreso to the time when these children would reach adulthood. One respondent suggested that it would be possible that one child would neglect the family and not support it in any way. Three respondents specifically expressed the concern that they have some male children since the

females would eventually get married and leave the homestead, but the males would remain after marriage. Thus the concern was that there be enough people around to help with the workload once the parents grew older.

6. Pregnancy

Respondents were questioned on how they thought the pregnant woman should care for herself. Responses basically fell into three categories: the amount of exercise the woman should get, the kinds of food she should eat and her consultation with health practitioners (all 11 respondents from group 1 made some kind of comment). Many group 1 respondents (six out of seven) thought the pregnant woman should do some physical work, but not an excessive amount. One respondent, however, thought the woman should do more physical work while she was pregnant. This respondent could not articulate a reason for her belief. Of those respondents from this group who commented on the pregnant woman's nutrition, most (four out of six) were able to indicate in some way that the woman should be eating healthy food during her pregnancy. Responses were mainly general statements of this nature; two respondents mentioned specifically fruits and vegetables, meat and milk as being important. Three respondents also noted that the woman should not drink alcohol during this time. Only one respondent brought up the importance of attending a clinic during pregnancy. One respondent did not know whether the woman needed to take any kind of special

care of herself and two believed that the pregnant woman definitely did not need any special care.

Respondents from group 2 gave more detailed, more comprehensive answers to this question (14 out of 16 respondents commented on this topic). There were four comments about the type of clothing she should be wearing; that it be loose and the shoes be flat. Several respondents (four) also noted the importance of the pregnant woman getting enough rest and fresh air. Respondents from this group agreed with those from group 1 on the amount of physical work the woman should be engaged in; she should do some but not too much (eight out of nine responses). Many respondents (six) mentioned that it was important for the woman to visit modern medical establishments regularly for check-ups and advice. One respondent thought she should be vaccinated against childhood diseases. Most of group 2 (11 respondents) mentioned that the pregnant woman's diet must consist of high quality food so that the fetus would develop properly. Many mentioned the importance of consuming more protein (six responses) and calcium (three responses) during pregnancy. Two respondents noted the importance of consuming more fruit or foods which provided vitamins. Only one respondent mentioned the importance of iron in the diet. One respondent from this group noted that at some homes the woman could not eat emasi, milk or meat when she is pregnant. This respondent believed that this practice was detrimental to the health of the baby and said that should she be in that situation, she would try to reason with her husband.

F. Child Care

Group 2 was asked the general question of what they had learned about the care of children (11 of the 16 respondents commented on this topic). Learning how to bathe the baby properly was the most common response (five responses). Several respondents (four) also mentioned that they had learned about balanced meals. Learning how to prepare for the arrival and delivery of the baby was mentioned by several respondents (three), with one indicating that this was one of the most useful things she had learned in the course.

1. Breast-feeding

All respondents, from both groups agreed that breast-milk was the best form of nourishment for the baby (all 11 respondents from group 1 and 14 out of 16 respondents from group 2 commented on this topic). Only one respondent from group1 gave a reason for this being the case; she thought that other kinds of milk may be the cause of the baby becoming ill. Two respondents from group 2 indicated that they believed breast-milk to be nutritionally superior to other kinds of milk, one noted that purchasing milk was more expensive and one thought that it was more convenient to breast-feed the child. Almost all respondents (seven out of ten from group 1, and 14 out of 15 from group 2) believed that one or two years was the ideal length of time to breast-feed a child. Four respondents

from group 2 thought it was important to breast-feed until the child was able to eat enough solid foods on its own.

Respondents were questioned on whether they thought the child should be breast-fed immediately after birth or not, in an attempt to discover their attitude toward the traditional practice of waiting until the breast had finished producing colostrum. There was a notable difference between the attitudes expressed by the two groups. Most respondents from group 1 (five out of seven) believed the child should not be breast-fed immediately. Two respondents thought that the child should be kept from the breast for a few days, and three others thought a period of weeks was a more appropriate length of time. Most group 2 respondents (eight out of 13) believed the child should be breast-fed immediately after birth; a few (four respondents) thought the child should be kept from the breast for one day. One respondent thought a few days away from the breast was necessary because the milk was still weak.

2. Infant Feeding

Respondents were questioned on when they thought a child should begin receiving solid foods, what kinds of foods the child should be given at this time and what kinds of foods should be consumed after the child was completely weaned from breast-milk. Group 1 did not agree on the ideal time to begin feeding the child solids; most (four out of seven respondents) thought three or four months was appropriate and the remainder thought that anywhere from eight

months to one year was soon enough to begin. The most common response from group 2 (six out of 14) was that six months of age was the best time to start feeding the child. There were a few (three) who believed food should be given between one and three months of age, and a few others (four) who thought that children did not need food until they were between seven months and one year old.

When questioned on the most appropriate types of food to give an infant, responses from the two groups were much the same (see Tables 24 and 25). Many respondents from both groups suggested that thin maize porridge is a good infant food. A few respondents from both groups indicated that this porridge should be served with milk, and a few group 2 respondents noted that mashed beans could be mixed with the porridge. Several respondents from both groups mentioned milk, eggs, juices, mashed potatoes and commercially prepared infant foods. Ground meat or fish was mentioned by only a few from each group. Vegetables were likewise suggested by few respondents from each group. Banana was the only whole fruit listed as a good food for the infant, and only one respondent from each group mentioned it.

Table 24

Attitudes Toward Most Beneficial First Food for Babies--Group 1

Response	Frequency of Response
porridge	7
prepared baby food	7
mashed potato	4
eggs	4
milk	3
vegetables	3
juices	3
fish	1
soft meat	1
fruit	1
jelly	1

total responses - 9

Table 25

Attitudes Toward Most Beneficial First Food for Babies--Group 2

Response	Frequency of Response
thin porridge	7
juices	6
mashed potato	5
egg	5
milk	4
prepared baby food	4
vegetables	3
fruit	2
ground meat	2
soup	1
sweet potato	1
toast	1
any food	1
don't know	1

total responses - 12

Respondents' attitudes on the correct kind of foods to feed a weaned child were very sketchy, especially those from group 1. This was probably because the question normally followed immediately after the question discussed above, and because respondents did not believe that there should be any qualitative difference between the diet of a child who was still breast-feeding and one who was not. Two respondents (out of seven) from group 1 thought that a weaned child should simply be given the food that the rest of the family was eating and several group 2 respondents (four out of ten) expressed the same view. There was a difference in the responses of the two groups, however, as many respondents from the second group (five out of ten) indicated the weaned child needed a diet which was different from that of the rest of the family. Two of these noted the importance of adequate protein being given to the child.

3. Child Health

a. Enemas

Both groups had some respondents who believed babies should have enemas (see Table 26), some who thought they should not have them, and a few who were not sure. Respondents from group 1 who thought they should have enemas, believed it should be done once a week or once every two weeks, to "clean out the stomach." Those from the second group who believed the process was necessary varied in their opinions of how often the enema should be

administered--from once a day to twice a year. Three respondents believed the child needed the enema in order to defecate--and that constipation would result without it. One respondent from this group said the enema should be used as a treatment for diarrhea.

Table 26

Attitudes Toward Whether Babies Should Have Enemas

Response	Frequency of Response	
	Group 1	Group 2
should not have	4	6
should have	2	4
don't know	3	1
total responses -	9	11

b. Diarrhea

Many respondents from both groups were aware of the dehydration therapy which recommends giving the child a mixture of boiled water, salt and sugar (five out of nine from group 1, and eight out of 12 from group 2). Most reported having learned of this treatment on the radio (three out of five from group 1, and five out of eight from group 2), with two group 1 respondents stating that they had learned about this treatment in primary school science. Two respondents from group 2 indicated they had heard of the therapy on the radio and in home economics. Several of the respondents (three out of

nine from group 1, and six out of 12 from group 2), however, when asked how they would treat diarrhea in a child, initially responded that they would take the child to a modern medical establishment. It was only when they were given a scenario where it would be impossible to get to such a facility, that they suggested using the dehydration therapy. Two group 2 respondents mentioned the enema as a treatment for the diarrhea.

c. Consultation of Modern Health Practitioners

Respondents from both groups were asked what reasons there may be, aside from illness, for taking a child to a modern health establishment. Several respondents from both groups (three out of ten from group 1, and seven out of 15 from group 2) said this should be done to check up on the health of the child, and so that the mother could get some advice on correct feeding practices. There was a considerable difference between the two groups' rates of response in the categories of immunization and of weighing of the children. While several respondents from group 1 (five out of ten - immunization and four out of ten - weighing) listed these as reasons for taking children to a clinic, almost all of those from group 2 did so (13 out of 15 - immunization and 12 out of 15 - weighing). Three group 2 respondents were able to list diseases which needed to be immunized against. One respondent from group 1 said that the weighing was important as a check on whether the child was growing at an acceptable rate; three from group 2 gave this explanation.

F. Clothing and Textiles

1. Sewing

Respondents were questioned on whether they were interested in sewing and whether they thought it was a useful skill to learn. Most respondents from group 1 (nine out of 11) expressed a keen interest in learning the skills of sewing; only one respondent was definitely not interested and one other was ambiguous in her response. Respondents wanted to learn how to make their own clothing, with three indicating that this was a way to save money and one thought she could make money by selling the articles they would sew. Both of the students who responded negatively had sewing machines at home but they were out of order.

There was a much different message expressed by the respondents from group 2 (all 16 respondents commented). There were many respondents who indicated that they did not like sewing and did not find it useful (six out of 16). Although there was a slightly larger proportion who said that they did like sewing (tem out of 16), three of these respondents, when asked what the least useful aspect of the course was, indicated that sewing was least useful to them. A total of four respondents from group 2 found sewing to be the least useful part of the course; only two found it one of the most useful. Two of the respondents who indicated that they liked sewing said that they did find it quite difficult. Those who held negative attitudes toward sewing expressed both a lack of interest (four out of six responses)

and a feeling that it was too difficult for them (two out of six responses). Three respondents felt that if they had been given more time to learn how to sew, they might have been able to learn the skill better.

Since commercial garment patterns are not readily available in Swaziland, respondents were asked how they would acquire the patterns necessary for clothing construction. One respondent from group 1 (out of five) did not know what a pattern was, one said she would make her own, and the remainder indicated that they would buy patterns in towns. Seven respondents from group 2 indicated that they would borrow or buy their patterns; two of these had not, however, seen them for sale anywhere. Pattern drafting is on the home economics syllabus. Four student respondents indicated that they could draft their own pattern, but three others said they could not--either because they had not learned how (two responses) or because they found drafting too difficult (one response).

Teachers mentioned problems in teaching sewing to students. Two teachers indicated that the students did not like this part of the course; with the shortage of time being a major problem. One teacher felt she could not adequately teach students to sew in the time allowed, and that it was therefore difficult to motivate them, especially when there often was not enough time to complete garments. There were many negative comments on the teaching of pattern drafting. Two teachers commented that they were not confident in their own pattern drafting skills and it was therefore

difficult for them to teach the students. Two teachers thought that it was not appropriate to teach pattern drafting at this level and again the time constraint imposed a limitation on how well drafting could be taught.

2. Textiles

The level of awareness of the properties of different types of textiles among respondents who had completed the course was very low. Many of these respondents either did not remember what they had learned (three out of nine), did not understand the material when it was presented to them (one out of nine) or said that they had never been exposed to this material (one out of nine). Respondents did not even list the major classification of natural and synthetic fibers when asked what they had learned about textiles; nor did they list any of the fibers that are covered on the syllabus. Two responses indicated a general knowledge of which types of fabrics were suited to warm and cool weather. Respondents were further questioned on how they would make a decision when purchasing either fabric or a ready-made garment. Responses indicated that decisions would be made on mainly subjective criteria of assessing quality and the aesthetic appearance was also important (nine out of 12 responses). Only three respondents indicated that they would look for a label or ask a salesperson, to find out the fiber content of the fabric.

Of the three teachers who commented on the textile theory section of the course, two believed that the section was too detailed for students at this level and therefore it was difficult to teach. One teacher commented on the importance of teaching students how to examine ready-made clothing in order to identify the type of fiber. One teacher commented that she believed this section of the course had practical value for the students.

3. Repairing Clothing

Respondents from both groups were asked (five from group 1, and12 from group 2) whether they knew how to repair worn or damaged clothing; all of those asked indicated that they did know how. Four out of seven respondents from group 2 said that they had acquired these skills in home economics, and three had learned how to repair clothing outside the course.

4. Handicrafts

As part of the additional topics included in the new curriculum, students were required to learn how to crochet, knit and do beadwork. Embroidery remained on the syllabus. Equal numbers of respondents from group 1 either were or were not able to perform each of these skills (see Table 27). Those that possessed the skills had learned them through friends or relatives and all but one of those who did not have the skills had a desire to learn them. In

group 2, there were more respondents who said that they could not perform these activities than those who said they could, particularly in the areas of crochet and beadwork. Once again, respondents who were not able to do these things expressed an interest in learning. A few respondents mentioned the possibility of selling handicrafts if they had the skills.

Table 27

Handicraft Skills

Skill	Posession of Skill			
	Group 1		Group 2	
	yes	no	yes	no
crochet	5	4	1	10
knit	4	4	4	6
embroidery	2	2	4	6
beadwork	1	2	1	10
total responses	9		11	

5. Laundry

There was a considerable difference in the comprehensiveness of the responses on the important aspects of how to do laundry, between groups 1 and 2. The questioning was very general; respondents were simply asked to describe what they knew about doing laundry. Respondents from group 1 were able to point out some things such as

separating colored fabrics from whites (two out of eight responses), use of fabric bleach (one out of eight) and the different treatment of woolens (one out of eight); but the responses were generally very brief and lacked detail. Group 2 respondents also covered the above categories, but more frequently (total of 15 responses). One respondent said that learning how to separate colors from whites was one of the most useful things she had learned in the course. This group also mentioned several additional aspects of doing laundry. Three respondents noted the importance of ironing clothing to kill germs. Five said that they had learned how to remove stains in fabric and many learned how to apply starch to fabric. One respondent commented that laundry was the least interesting part of the course for her.

The three teachers' comments on the laundry section were varied, with two teachers praising and three discounting the usefulness of the topic. Two teachers believed that students would not change their behavior in this area, and it was therefore pointless to teach it to them.

G. Teachers' Concerns

1. Time

By far the most predominant concern which teachers had with the new syllabus was the shortage of time available in which to cover the required topics. Every teacher but one (out of nine) mentioned this problem and those who did bring it up discussed it at length. Teachers felt they had to rush through the material and they were worried that they were not covering it adequately. Two teachers had scheduled classes outside of school time and they still were not able to complete the syllabus. Four teachers commented that they were not able to cover some topics, as a result of this shortage of time. Handicrafts were often dropped and students often did not have enough time to finish sewing their garments. One teacher believed that students would like sewing more if they had more time and another said there certainly was not enough time to sew a pattern the students had drafted themselves, as the syllabus requested. Four group 2 respondents also commented that they felt that they had not been given enough time to complete the syllabus. One respondent noted that she was unfamiliar with some topics on the final exam. Three others said that they had not been given enough time to learn how to sew properly.

Teachers were, however, unwilling to drop any of the new topics with the exception of the sensitive areas of family living. There was a general feeling that the new topics were too important to remove

from the curriculum. Four teachers felt that the only feasible solution was to return to the previous arrangement of having two separate courses, incorporating the new topics in the most appropriate area.

2. *Assessment*

There was definitely no consensus among teachers (of the seven who commented) on the appropriateness of the means used to assess students. While some had no problem with the Junior Certificate Examinations in home economics, two teachers thought the questions tended to be inappropriate or to be too simple. It was felt by one teacher that having three exams for one course was too time consuming for students. One teacher was unhappy with the removal of the practical exam in needlework because the O-Level course in Clothing and Textiles still used this method of assessment and she felt students needed to be prepared for it. Continuous assessment of sewing has replaced this practical exam, but the responsibility had not as yet been handed over to teachers--it was still done by home economics inspectors at the end of each year. One teacher felt the teachers could do a better job of this and that the role of the inspector should just be to monitor these grades. Two teachers felt the assessment of practical work tended to be biased in favor of some schools. Two teachers mentioned that the published results should be separated into grades for practical work and for theory, so that they could get a clearer idea of how well their students had

performed. One teacher commented on a contextual factor which inhibited the progress of her practical exam in cookery; she did not have enough utensils in her kitchens.

Group 2 was asked how they felt about the means used to assess their work in home economics. Not one respondent who was asked this question (a total of 14) found the examinations difficult; most (seven out of ten) were content with the exams and two respondents found them easy. The only complaint about the written examinations was from the respondent who found questions on the exam which dealt with topics she had not been taught. Respondents had similar comments on their practical exam in cookery, except that three said that they were nervous during the exam and felt that they did not perform at an optimum level as a result. Many (six out of ten) felt that they were not given enough time to complete the tasks they were given. Two of these respondents said they had encountered difficulties with a shortage of kitchen utensils or equipment which did not work properly.

3. Finances

An area of concern which is a contextual factor, not specifically related to the curriculum itself, but which has a strong effect on the success of the curriculum is the amount of money available to home economics teachers. In recent years, the Ministry of Education has ceased giving cash payments to home economics departments and

they have since been forced to rely solely on fees paid by the students who take the course. All nine teachers saw this as a serious problem. Home economics departments are now responsible for paying for all costs related to conducting practical lessons in cookery and sewing, including equipment maintenance. They pay these costs with money raised by charging home economics students a course fee. Teachers found it difficult enough to pay for food, fabric and other incidentals necessary to conduct practical lessons; equipment maintenance was impossible. As a result, most of the schools had a shortage of equipment which they could not afford to replace or were using equipment which did not function properly. Four teachers had devoted their own time to raise funds in order to ameliorate their financial problems. In one school, students were involved in the fund raising and the headmaster of this school commented that they were learning from the experience.

Fees for the students had increased since the cash subsidies from the Ministry had been discontinued and three teachers expressed the concern that the financial burden imposed on the student or the people supporting the student had become unreasonable. Some students who desired to take home economics would not be able to do so if they could not afford the fees.

The financial arrangement between the person controlling the school funds and the home economics department was a serious problem in two of the four schools sampled. Teachers in these schools reported that they were not allowed access to the funds that were rightfully

theirs. The person controlling the funds, in most cases the headmaster, would not give the teachers money when they asked for it and they were not given all of the money that was collected from home economics students. These teachers believed the money was being spent in other areas of the school. The teachers reported that headmasters did not understand the reasons for the high expenses incurred by home economics departments. The result was that students were not given the necessary amount of lessons in practical areas. In one case the entire first year of the program was devoted to theoretical instruction and in the other case this went on for two years. One of the headmasters in these two schools only said that he would rather the home economics teachers collected their own fees, but the Ministry would no longer allow it. The other headmaster saw the financial arrangement with the home economics department as a problem, but his perspective differed from that of the teachers. He felt that when the teachers were collecting their own funds that the money was not being properly accounted for--he believed some of it had been disappearing. He said that the problem at the present time was that teachers were not cooperating by giving him receipts for the money they spent. Neither headmaster commented on whether home economics departments were using all of the funds collected from home economics students.

4. Teacher Resources

The shortage of resources available for the new topics was a concern for all but one teacher (out of nine). The Ministry had supplied teachers with booklets for students which covered the new sections, but teachers were not happy with these booklets. They felt the booklets themselves were inadequate and that the teachers needed more resources to provide them with additional information. Three teachers indicated that they had searched out some of their own resources from Science textbooks and through resource people in the community such as nurses and people from the Family Life Association. One teacher felt, however, that the Family Life Association pushed the use of contraceptives and the students would therefore be encouraged to engage in sexual activity. The shortage of resources in another contextual factor which has a negative effect on the success of the new curriculum.

5. Streaming

In three of the four schools there was a system in place whereby students who were academically inclined did not take home economics. Teachers in these schools objected strongly to this system, saying it fostered a negative attitude toward home economics, an attitude held by both students and teachers in other subject areas. Students who wanted to take home economics, but were of high academic ability, were not allowed to do so. And low

achievers were often forced to take the course even though they were not interested in it. Teachers preferred that the student be allowed to make the choice. Headmasters all indicated that streaming did take place in their schools. One headmaster said that ideally the student should be allowed to make their own choice, but he did not elaborate on the reasons why they were not given the choice. The other headmasters had no comment on the streaming system other than indicating that it existed. The school which did not stream offered all students a choice between home economics and another course. This concern is another contextual factor affecting the successful implementation of the curriculum.

Chapter 7

Summary and Conclusions

A. Introduction

The extent to which this home economics curriculum is effective in meeting its goals and the goals of home economics in general, is severely limited by the politico-economic climate of the country. The way in which Swaziland is pursuing its development does not give priority to solving the problems experienced by the masses; in fact this development policy has made these problems more severe. In a country which is 85% rural, Swaziland's family units reside mainly on the homestead. The changes which the family has been put through during the history of the first European influence up to the present time, have left it incapable of providing a good life for its members. The ruling class of Swaziland has taken on a *comprador* role for the interests of foreign capitalists--this relationship provides the rationale for all other Swazi government policy. It guides policy for education and for rural development, the sectors which this study is most related to. The home economics curriculum is in many ways a good one, but the society which it seeks to change imposes serious constraints on its success.

Swaziland has modelled its development policy on the premises of *modernization theory* which assumes that by emulating the qualities of the developed world a country will itself develop. On the basis of

this reasoning, it was assumed that if Swaziland developed large scale commercial ventures such as mining enterprises, commercial agriculture and industry, it would enter the world capitalist economy and eventually move ahead in all sectors of its own economy. Foreign capital, South Africa being the major source, is now firmly entrenched in the Swazi economy, but the 'development' which was anticipated has not come about. Instead, the economy has become, gradually more dependent on foreign capital to keep functioning and on foreign aid to take care of the social problems which have arisen out of this dependency.

In order to produce the high profits which these foreign investors demanded, a labor force had to be supplied at a very low cost. If the families of the workers were to survive, production on the homestead had to be maintained to supplement these wages. Hut taxes were introduced to lure workers away from the homestead; gradually as the market economy moved in and schooling began to be seen as a necessity, the family could no longer survive without a certain amount of cash. Foreign capital had the workers it needed, and the Swazi government made sure they did not agitate for higher wages. But the well being of the family became worse instead of better with this exodus of many adult males from the homestead.

The homestead became an economically unviable production unit. As the amount of land had been severely reduced, and the numbers of cattle had also decreased, it became necessary to grow more crops. Women were not capable of taking over all of the tasks necessary to

keep the homestead functioning, with most of the men away working and many of the children at school. The amount of cash coming back to the homestead from the workers was also not enough to make up for what the homestead was not able to produce. The family is now fragmented, malnourished and in ill health.

The rapid expansion of the education system during the 1970s was undertaken because of this faith in *modernization theory*. Throughout the world, at this time, countries proceeded to invest in *human capital*, believing that returns to the investment would be realized in economic growth. In Swaziland and the rest of the Third World, the type of education prevalent in advanced countries was adopted in the belief that investment in this kind of education would speed up development. This has definitely not happened, and the education system is now fraught with problems.

Highly academic in its orientation, the education system is training young people for a type of work that does not exist. In order to be useful, the education should be focused on providing a minimal level of literacy and knowledge of how to improve production on the homestead. However, 'high status knowledge' is seen as the only important kind of knowledge and is the only kind that parents will pay for their children to receive. Since only a very few well-paying jobs are available, graduates who are not able to find such jobs are destined to work at low skilled, low paying jobs, or to remain on the homestead frustrated by their unrealized expectations.

Home economics must be viewed as part of this education system within the political and economic structure of the country. In order for family life to improve significantly, the government in Swaziland would have to completely change its policy of development. The focus would have to change from promoting foreign investment and integration in the world capitalist system, to policies which would work to the advantage of the family. Economic incentives and a massive public education program would be necessary to increase production on the homestead to the point where the country would be self-sufficient in food. Many of the topics covered in this home economics curriculum would have to be presented to the public and not just to a select group of adolescent females, particularly those topics dealing with nutrition, the use of pure water and proper disposal of rubbish and human waste. The education program would have to be backed up with concrete government support.

These changes are, however, unlikely to be implemented and home economics is therefore faced with the problem of how to operate and produce results within the present system. The goals of home economics, as articulated by Marjorie Brown, should be to produce a better life for families and to provide ". . . emancipative action in freeing individuals, the family, and society from dogmatic beliefs and from social forces which are dominative or exploitative" (Brown, p. 101). This study has found that many of the changes to the curriculum have been positive in the sense that they are dealing with issues of utmost importance in Swaziland, and are therefore attempting to emancipate the people from their unique situation.

Some of the changes have, however, not been as effective as they could have been. Despite the constraints which limit the success which such a curriculum can have, it can be more successful. The following discussion will draw conclusions from the data collected and suggest recommendations of how the curriculum can be further improved.

B. Hygiene

This topic is definitely a valuable addition to the curriculum, both because of the positive response it received from both students and teachers, and because it is a topic which responds to a local need. There was a definite interest expressed by group 1 respondents in topics related to hygiene. Group 2 responded in a very positive manner when asked about these topics and they often remembered the hygiene section when asked more generally how they had benefitted from the course. There were very positive results in reported behavior changes in this area. Students had been instrumental in making changes around the home which made the environment more hygienic. Some respondents had discussed these issues with family members and met with a positive response, although a few did meet with a negative reaction. Teachers also liked these topics.

Given the very serious problem of the spread of disease due to poor hygiene in Swaziland, the topic is of utmost importance. The cycle of

disease which is spread by the improper disposal of human waste, which makes its way back to the human mouth either through water or by flies carrying it to the food, must be broken if this problem is to be solved. Using a pit latrine and purifying drinking water are the most important practices for breaking this cycle, but any behavior which minimizes the presence of flies will also make it difficult for the pathogens to be carried back to the food.

Unfortunately, even though all respondents were enthusiastic about the topics, and behavior change seems good, the changes in levels of knowledge and attitudes in this area have been inadequate.

1. Water

There was not a significant change in the knowledge that pupils had as to which sources of water are hygienic, nor was there a change in the knowledge of what effect drinking this water would have on the human body. It would not have been too surprising to find very little behavior change in purifying the water, given that 84% of homesteads do not boil their water (Green, p.16), many of them because it would require the expenditure of too much time and energy collecting firewood. But it is surprising to find that even the knowledge which would initiate an attitude change had not been acquired after completion of home economics. Respondents from both groups were only vaguely aware that illness can be caused by

consuming contaminated water, and most of the responses indicated an awareness only of the diseases Cholera and Bilharzia.

The concern of families being provided with clean water is serious enough that the topic deserves a major emphasis in the curriculum. The present syllabus does not mention the topic of pure water anywhere; it may or may not come up in the discussion of common diseases found in Swaziland. All students who complete this course should be distinctly aware of all the consequences of consuming contaminated water, which sources of water are pure, and how to prevent the contamination of water sources. Although Cholera and Bilharzia deserve special note, since they are both serious diseases, a much broader level of knowledge of the other diseases which can be spread through contaminated water needs to be instilled in these students. In particular, the gastro-intestinal problems and the likelihood of getting worms this way needs to be emphasized, especially the effect which either can have on a malnourished child. When it becomes clear that the death of children can be partially attributed to their consumption of impure water, the issue becomes much more real and a behavior change is more likely. The topic should be clearly outlined so that teachers are aware of all the facets which must be covered. The topic can also be combined with 'the family in changing society' , where it could be explained why contamination of water is a serious problem now but was not so serious in the past.

Although one could not expect universal behavior change among students who had been exposed to this information, given the shortage of labor on the homestead, one can likewise not hope to see any behavior change if they are not exposed to it. The topic is a crucial one to teach, if family life is to be improved and we can reasonably assume that if it did receive a major emphasis, that some change in behavior would result.

2. *Flies*

As with attitudes toward clean water, there was not a significant change in attitudes toward the proper disposal of rubbish and human waste. Respondents who had completed home economics were not adequately aware of the illnesses which could be carried by flies. Once again, Cholera was known of as one of these illnesses, but other diseases and gastro-intestinal illnesses were not. There was some behavior change exhibited in this area, such as moving of a cattle byre and digging of latrines and a rubbish pit. These are positive indications of the effectiveness of the curriculum, but one can assume these changes would have been more widespread had the topic received more emphasis.

The topics of disposal of rubbish and human waste receive brief mention in the syllabus, but are not elaborated on. Teachers are left to interpret how the topics should be approached. Cleanliness inside the home, and especially the kitchen, has been taught since before

this curriculum was revised, but the connection with the cycle of human waste to the human mouth is not specified. This topic, as much as the consumption of pure water, deserves a strong emphasis. Family life cannot be improved in Swaziland until this cycle of spreading illness through poor hygiene has been broken. Proper disposal of human waste should be emphasized strongly, along with the importance of having a pit latrine and using it. Students must have it quite clear in their minds what the reasons are for using a latrine, by being able to connect the improper disposal of human waste with the illnesses they are well aware of, especially as they affect young children. Proper disposal of rubbish should likewise receive a strong emphasis, and the link between human waste to flies and back to humans should be clearly established. This link should be mentioned in all discussion of cleanliness around the home so that students realize why hygiene is so important.

Once again, this shortage of labor around the home would be a factor which could prevent an attitude change from producing a behavior change. One respondent from group 2 specifically mentioned that she did not bring up the issue of digging a latrine at home because she would have been responsible for the digging. However, three of the respondents did instigate the digging of a latrine or a rubbish pit at their homes, and one could safely assume that if the attitudes had changed significantly in this area, more behavior change would have occurred.

3. First Aid

Students expressed a keen interest in this topic but their level of knowledge of the appropriate treatments was not good. Awareness of how to treat a burn, a cut or a broken bone was inadequate among both groups--the only treatment which group 2 was more aware of than group 1 was treatment for poisoning. There is a need to teach students about first aid since many homesteads are a long distance from a modern health establishment, and many accidental injuries can be treated at home. Some standardized information on this topic must be made available to teachers--they are given no guidance as to what the appropriate treatments are.

C. Nutrition

This section has remained virtually the same since the curriculum was revised. There was a definite change in the knowledge of what constitutes a nutritious diet, and a good proportion of respondents who had completed Home Economics reported that their behaviors in this area had changed. However, when attitudes about distinct categories of food were examined, the respondents did not show an ability to apply their general nutritional knowledge. When discussing protein, fruits and vegetables, the attitudes expressed reflected the common practices much more than what students should have learned about nutrition in this course.

The nutrition section needs to be tailored to fit the local situation. A general discussion of nutrients and nutritional needs is not good enough when such serious problems of malnutrition exist in the country. The acquisition of nutrients from foods available locally needs to be stressed more than it has been. This can be taught in the context of the family in changing society by making note of the change in food consumption patterns over history and addressing the ways in which nutrition can be improved given the present situation.

1. Maize

Since maize is the staple food in Swaziland, and all families consume it daily (de Vletter, p.177), it deserves a major focus in the home economics curriculum. It does receive adequate emphasis, as is indicated by the distinct change in attitude about the nutritional qualities of refined and unrefined maize and the reasons for the difference in quality. There was also a definite change in attitude toward whether maize and vegetables constituted a balanced meal, although a few group 2 respondents believed that this meal was balanced. There was not, however, a noteable change in attitudes toward the nutritional quality of the packaged soups often served with maize; group 2 was not adequately aware of the poor nutritional value of these soups. This topic is not directly addressed in the curriculum, but since it is such common practice to use these food products, they need to be discussed in home economics. All

students who have completed the course should know that these products are not nutritious.

2. *Protein*

This topic does not receive the emphasis which it must be given, if taking this course is going to help families deal with problems of protein deficiency. The change in food consumption pattern must be pointed out to students along with suggestions as to how the diet can be improved so that protein needs are met. Each person who studies home economics should know how much protein is required by each population group. They should be keenly aware that children and pregnant and lactating women need the most protein. At the same time, traditional taboos and patterns of allocating food, both of which put the women and children in a disadvantaged position *vis-à-vis* acquiring enough protein, must be addressed in the syllabus. This is a sensitive topic to discuss in class, since it encroaches on the government's plan to maintain tradition in all its forms, but if home economics is to emancipate people from the negative facets of their belief system, the topic must be part of a discussion of nutrition.

Now that milk is no longer the major food, and the consumption of animal flesh is still sporadic, alternative means of supplying adequate amounts of protein must be explored. The inclusion of locusts and caterpillars as sources of protein is a positive addition. At the times of the year when they are plentiful, these insects can

provide the family with adequate amounts of protein. Methods of preserving meat are not taught in the curriculum, nor have they been traditionally used in Swaziland. However, drying and salting of meat would help immensely to increase the protein value of a slaughtered animal. Although this practice would help families have a better protein supply, the most effective way to remedy the protein shortage is to encourage the use of legumes.

Swazis traditionally have not cultivated or used beans in their diet and although the utilization of legumes has increased, only 25% of families use them daily and 30% never use them (de Vletter, p.178). By eating beans with their maize any time animal protein is not available, the protein deficiency problem would be alleviated in Swaziland. The attributes of this food should therefore be strongly reinforced in the curriculum. Students should be taught that not only would beans prevent their children from dying, but also that if planted between the maize plants, they would increase the productivity of the soil by replacing the nitrogen that maize removes. Cooking of legumes in a variety of ways should occupy a larger proportion of the practical lessons and the practical examinations should regularly address the issue of how to provide protein using vegetable sources only.

The shortage of labor on the homestead is certainly a reason why beans would not be prepared every day. They take a long time to cook and therefore require more fuel than do packaged soups and vegetables. However, if women become aware of the reasons why

they should use beans regularly in their cooking, they will be more likely to expend the extra energy necessary to collect more fire wood.

3. Vegetables

Vegetables are another example of a topic which must be geared to the local audience. The nutritional qualities of vegetables which are available should receive the major focus, especially as related to nutritional problems which occur in the region. There was no change in attitudes toward the frequency with which vegetables are needed--half the respondents in both groups thought that less than one serving of vegetables per day was adequate. These attitudes reflect the practices of most families; they do not reflect the knowledge these students should have acquired in home economics. Anyone who has taken this course should know the importance of eating vegetables daily.

There is some vitamin A deficiency in Swaziland, as well as some iron deficiency among women. These problems could be solved by an increase in the utilization of dark green, dark red and orange vegetables. Wild greens were traditionally widely used when in season and dried to make them available throughout the year. This research found that these wild greens do not seem to be seen as part of the vegetable family for the people interviewed in this study. These vegetables should receive a strong emphasis in the curriculum

as extremely important vegetables. They are now mentioned in the curriculum, and this is a positive change, but they need to be taught in the vegetable section and not as a separate topic. These vegetables should be used often in class and students should be made aware of how wild greens can be used in recipes and how they can be substituted for other vegetables.

Preservation of greens by drying them should be emphasized as very important, since it makes the nutrients in these plants available all year. Once commonly done in all families, the practice of drying greens has become less common. Students should be encouraged to expand this traditional practice to include the drying of the dark green outer leaves of cabbage, pumpkin leaves, and any other edible dark green leaf. If this discussion of preservation is related to solving eye problems caused by a deficiency of vitamin A and preventing anemia in women, the practice will be seen as something which is necessary.

Tomatos and pumpkins, both commonly used in present day Swaziland, should be emphasized in the curriculum as excellent sources of vitamin A. Respondents did not commonly mention either one as a very healthy vegetable.

Cabbage was most commonly mentioned by both groups of respondents as a very healthy vegetable, when in fact the only nutrient which it contains a substantial amount of is vitamin C, most of which is destroyed in the cooking process. Since this vegetable is

commonly used in Swaziland, it should be specifically referred to in the curriculum as a food very low in most nutrients and unless prepared in a salad, and far inferior to dark green leaves.

4. Fruit

As with vegetables, students who had completed home economics had not acquired the knowledge of the frequency with which fruits should be eaten; there was no difference between their attitudes and those of group 1. The attitudes expressed reflected the practices of most families, most of whom do not consume enough fruit. All students who have completed this course should know that fruits are needed daily or twice daily.

There was a strong belief among both groups that citrus fruits were very nutritious, and that all other fruits were much less so. Although citrus fruits are available in Swaziland when they are in season and they are very rich in vitamin C, they must be purchased and only 40% of families consume this type of fruit (de Vletter, p.178). Here again, the focus must be on food that is locally available. In the case of fruits--mangoes, papayas and avocadoes can be easily cultivated at most homesteads and edible fruit grows wild. As with wild greens, wild fruit should be included in the fruit section and not as a separate topic. Students should all know that any kind of fruit contains vitamin C and that the guava, which grows wild in Swaziland, is a particularly rich source. The vitamin A content of the

mango, papaya and avocado should be emphasized and the avocado should also be highlighted as a source of essential fatty acids and protein. Students must realize the plentiful sources of nutrients that are around them and can be acquired without having to buy foods which contain them.

5. Malnutrition

Respondents were not well enough acquainted with the two types of nutritional deficiency which occur most frequently in Swaziland, protein deficiency and Pellagra. This is yet another area of the curriculum in which specific circumstances which affect Swazi families must be taken into consideration.

Protein deficiency is the most debilitating of the nutritional disorders. Only 7 children of every 10 born in Swaziland will live to their fifth birthday (de Vletter, p.186) and 30% of all rural children show signs of stunted growth (National Nutrition Survey, p.6). The major cause of these problems is a severe shortage of protein in the diets of young children. Although the changes which the family has undergone in the past century can certainly explain why providing enough protein is a problem, the situation will not change until the population becomes aware of the extent of the problem, how to detect signs of protein malnutrition and the ways in which the problem can be solved. The latter aspect of this issue has been addressed in the section above on "protein".

There was no change in students' awareness of the prevalence of malnutrition among Swazi children; about half the respondents in each group believed that many children in the country suffered from deficiency diseases. Students who have completed home economics should be well aware that the problem is widespread. This must be emphasized in the curriculum.

Respondents were well aware of the symptoms of Kwashiorkor, but less able to identify stunted growth as a danger sign that the child may be developing the disease. All respondents in both groups could list off the visible signs of Kwashiorkor--the swoolen belly, the thin body and the discolored hair--extremely well. It appears that this is common knowledge in the country and that having studied about protein deficiency in home economics does not add to the knowledge. If students are to be equipped with the tools necessary to make a change in their own families, they must be able to recognize that stunted growth is an early sign of protein deficiency, and they must know how to recognize that their children are not growing at an acceptable rate. Students who have completed the course are not equipped with these tools.

Group 2 respondents were slightly better able to identify the cause of growth stunting, but it was still only a small proportion. No respondent from either group identified growth stunting as a symptom of protein malnutrition. All students who have completed home economics should be keenly aware of the importance that a child grow at an acceptable rate. This should be an important part of

the nutrition section, and teachers must be directed to give it strong emphasis. The key to teaching the importance of a child's growth pattern is to emphasize the necessity that every child visit a modern health establishment regularly to be weighed and have the weight plotted on a growth chart. All clinics in the country use the same chart and most students will have seen them. Students are not being instructed in this area, as is indicated by the few respondents from group 2 who were able to say how they would know if a child had stopped growing. Almost all of them knew that a child should be weighed regularly, when asked why a child needed to visit a clinic, but they were not able to make this important connection between protein deficiency and growth stunting.

Although in the questioning about maize, students were aware that unrefined maize was more nutritious, when asked specifically about Pellagra, they were not able to connect the skin disease with a deficiency of the niacin which is lost in the refining process. The respondents needed to be able to apply their knowledge, because the disease itself was not mentioned, only the skin sores which are its major symptom. Respondents from group 2 had a better awareness that the skin condition was caused by some kind of nutritional deficiency, but not one respondent identified niacin as the nutrient which was lacking. Since Pellagra is so common, it also deserves special emphasis in the home economics curriculum.

6. Cooking

Cooking is always a very popular part of home economics; students enjoy preparing food which they can eat in class. It should be a concern, however, that students taking home economics in Swaziland are learning to prepare dishes which they can prepare in their own homes. The cooking should also make use, as much as possible, of ingredients which are available to most families. There was a strong indication that students had learned a great deal about preparing food when the dishes they prepare at home were compared with those which students just beginning the course said they prepared at home. However, the dishes which group 2 respondents most commonly cooked at home were meat dishes and baked items, both of which are expensive and most families certainly cannot afford the ingredients very often. It is interesting to note that the dishes that were not prepared at home were those with expensive or unfamiliar ingredients. There was a good indication of behavior change in the preparation of vegetables. Swazis traditionally used methods of preparing vegetables which were very good for conservation of nutrients, and it is good that students realize the value of these methods and begin to use them again. Dishes containing legumes were mentioned by a few group 1 respondents, but no respondents from group 2 indicated they had learned how to prepare these dishes.

The practical part of home economics must also reflect the needs of the people. Priority should be given to lessons on how to prepare

inexpensive but balanced meals, especially when home economics is such an expensive course to teach. By using legumes, maize and wild fruits and vegetables, expenses can be minimized and the lessons become much more useful in a practical sense to young women when they take their skills back to their families. Traditional dishes have been included in the new curriculum, but the emphasis is still on dishes which use expensive animal protein and wheat flour. This emphasis should be changed and the change should be relected in the questions on the practical examinations. Teachers gear their teaching to the type of examination which students must complete at the end of the course and the examination therefore becomes a powerful motivating force for the teaching.

D. Family Living

This section was the most problematic of the new topics which were added to the curriculum. Issues which relate to family life which are not part of the two major areas of foods and nutrition, and clothing and textiles, have been an important aspect of home economics for many years. The new curriculum, by including these topics, was catching up with the international trend of broadening the focus of the field. And indeed these issues are very important ones in a society which has imposed so many changes on the family in such a short period of time.

The topics in this section are not, however, being delivered effectively. Teachers are uncomfortable with many of the topics and the response of students reflects the attitudes of the teachers. Many of the teachers were unprepared for these topics; their uneasiness in teaching topics related to procreation seems to be partially due to a moral objection to including these topics in home economics and partially due to a lack of direction as to how to go about teaching these topics.

Family life education was formerly taken care of within the family, when the traditional system of education was a strong force. Educating the young about the accepted ways to choose a mate, the ceremonies and customs of marriage, the ways in which children were born and cared for--were all part of the family's responsibility. Now that the family has been disrupted by family members living away from home for extended periods and by the poverty which has descended upon it, it is no longer able to perform all the functions it once did. While family relationships remain a strong force in the lives of most Swazis, these links are not what they once were when the entire family lived and worked together. The family must now work harder to build a close, supportive social network. The rising rates of adolescent pregnancy and venereal disease are strong indications that family life education is not as effective as it once was. If the family is no longer performing this function, then it must be taken care of by other social institutions.

Including these topics in home economics is natural, given the nature of the subject. It is not, however, an answer to the problems since the proportion of all young people who take the course is very small. This has already been mentioned as a constraint on the effectiveness of the entire curriculum. It is an important part of the course, despite this constraint, and steps must be taken so that teachers will find it easier to teach to students.

The way this curriculum was implemented gave very little support for teachers to whom it was given. An entirely new section, family living, was added to the curriculum and teachers were faced with the brief phrases in that curriculum which indicated that they should teach such topics as "growing up and mate selection", "family size in relation to family resources" and "roles and responsibilities of family members". The workshops that were conducted and the resources which were provided to teachers were inadequate to prepare them to teach topics for which they had no training and about which they had no experience. And four years after the curriculum had been in operation, they seemed to be no better equipped to handle the family living section. Steps must be taken either by the Ministry of Education or the Home Economics Teachers' Association to organize in-service education and to develop good resources for this section of the curriculum.

The changing family in society deserves more than a cursory mention in the curriculum. It should be a substantial section on its own and should also be incorporated into many other areas, some of

which have already been suggested in the section dealing with nutrition. If students understand the drastic changes which their society has undergone in the last century, they will be able to get a much better grasp of the present family life conditions and what they can do to improve these conditions. Under the topic of roles and responsibilities of family members, for example, the importance of family members working together to improve hygiene or increase production without the limitation of traditional roles could be emphasized. Students should come out with a sense that families must change as society changes.

1. Money Management

This topic is an important one for young women, most of whom will eventually hold a great deal of responsibility for managing the resources of their families. This was a topic in the family living section to which teachers responded in a positive manner. They felt it was a topic which most students knew very little about and was of good practical value for them. This topic should be integrated with management of family resources, since money is not the only important resource which a family must use in an efficient manner. In this section, an attempt should be made to help students develop their priorities for spending. Many families have given education a higher priority than food and the damaging consequences of this ranking must be made clear to students. This would link very well with the section on nutrition.

2. Menstruation

Students and teachers alike appreciated this topic. With families separated and students often living away from home for the school year, many are not adequately prepared for menstruation. It appears that the students from group 1 who did know of menstruation had heard about it from people other than members of their families. It is difficult to say for certain that none of them had instruction from their families, because those who said they did not know what menstruation was, may not have known the English term. The proportion of group 2 who said they had learned about menstruation for the first time in home economics, does indicate that education through the family on this topic is not adequate. There was a good rate of behavior change of methods of disposing of sanitary protection.

3. Birth Control

Although teachers are uncomfortable with this topic and some believe that the teaching of it may encourage sexual activity, they should be made to realize that if it is not taught here the girls may never have the methods of birth control clearly explained to them. It is an important issue to discuss given the very high birth rate and perhaps even more importantly, the high death rate of women in their child bearing years. Women do not have control over when they have children or of how many they have, particularly since the

traditional means of limiting the number of children no longer operate. Giving women the knowledge of how they can have control over when and how many children they have, may not actually give them that control, since the attitudes of the husband and the extended family are such a powerful influence. But at least if a woman knows what her options are, she knows how to seek them out should she make the decision to prevent conception.

4. Venereal Disease

Given the widespread occurrence of Gonnorhea and Syphilis, and the fact that these diseases are often carried by women without them realizing it, this topic must be taught thoroughly. It should certainly be taught to all students, not only those who take home economics. It is, however, an important aspect of learning about bearing and rearing children, since untreated VD can produce sterility or harm the innocent unborn. It is particularly important that women realize these consequences of letting the diseases go untreated, since they can pass them on to a man while they are in an inactive phase. Traditional superstitions about how the disease spreads must be discussed in class--students must be made aware of the necessity of modern medical treatment and that if symptoms go away, the diseases do not. There was a definite change in awareness of the presence of the diseases, among students who had completed the course, but no change of awareness of the consequences of letting them go untreated. AIDS should also be discussed since it has now

begun to spread to this part of Africa. The topic of venereal disease is not specified in the curriculum; it may or may not be included in the "common diseases and their prevention" topic which is part of health and hygiene.

5. Child Bearing

There was no difference between the attitudes of group 1 and group 2 on the best age to begin having children, the ideal number of children to have or the best time period for spacing between children. All students held attitudes which were beneficial to their own health and well being and that of the children they would bear. These attitudes were, however, very different from what actually occurs in the lives of most Swazi women, where many have a child before age 20 and most have more than four children each. It is worthwhile discussing these topics in class, but very little can be done to change behavior since the external influences on that behavior are so powerful.

Attitudes toward spacing between children were similar in both groups--students agreed that two or three years between children was best. With breast feeding being such a common practice, the spacing is often two years, even though the traditional system of enforcing spacing is no longer effective. There was a change in the reasons given for this spacing period; all students said that the child needed to be well cared for before another was born but group 2 was

able to speak in terms of providing adequate nutrition for the child by breast feeding for a long period of time before giving birth to another child. However, only one respondent from group 2 mentioned the risk to the mother's health from having children too close together. This needs to be emphasized in the curriculum, and a clear link should be established between the health of the mother and the health of her children.

Students held reasonable attitudes toward the number of children they would like to have; respondents from both groups agreed that four children or fewer would be ideal. This is a topic which should be part of the curriculum and is not specifically mentioned there. However, the life circumstances of most of these girls will dictate to them how many children they will have, and their attitudes will then be irrelevant. While part of the reason for this is that the husbands and senior members of the extended family will make these decisions for women, the fact is that the present social circumstances require a woman to have more children than she needed to have in the past. Many of her children will live away from the homestead because they will be working for wages. Since no formal social security program exists, parents need to have at least one male marry and remain on the homestead. Other children may provide some financial support, but some young people must remain on the homestead to do the physical labor. The students in this study do realize that it would be difficult to provide for many children, but they also know what the future may hold for them if they do not have enough children. All that home economics can do is point out

that large families are more difficult to feed and to make the student aware in practical terms of the consequences of children not getting enough food.

6. Pregnancy

There was an increase in awareness of the importance of a woman taking special care of herself when pregnant, especially in the area of nutrition. Respondents from both groups often brought up the issue of the amount of physical work in which a pregnant woman should engage; the responses from both groups indicated that the woman should do some work, but not too much. This is a reasonable attitude to hold, but it does not reflect the reality of most women who must carry on with their heavy work load. Since the attitude was the same in both groups, no conclusion can be made about the role home economics played in the formation of the attitude. And the attitudes held would, in any case, have little likelihood of affecting behavior when these girls would become pregnant. If the pregnant woman is one of the few adults present on the homestead, she will have to work.

Although significantly more group 2 respondents mentioned the importance of proper nutrition during pregnancy, there was not an adequate level of awareness of the pregnant woman's nutritional needs. Protein, calcium and iron are the most crucial nutrients for the pregnant woman and they are often not adequately supplied to

these women in Swaziland. Several respondents from this group did note the importance of protein in the pregnant woman's diet, which indicates an increase in awareness, but this awareness should be universal. And when considering previous responses on the frequency with which protein should be consumed by the general population, most students would not be aware of the amount of protein a pregnant woman should have. The need for calcium and iron was generally not recognized. The importance of nutrition for the pregnant woman must be stressed and all students who complete home economics should know of its importance.

Pregnancy taboos, which still exist in Swaziland, were only mentioned by one respondent, and she spoke of these taboos as a tradition which is enforced in families other than her own. It is clear that the taboos against consumption of milk and meat do still affect many pregnant women, and they should therefore be discussed in home economics in an attempt to emancipate students from the severely negative consequences of this particular tradition. Although the woman may have very little control over whether these traditions will operate in her family, she must become aware that they are detrimental to her health and to the health of her children. In a similar vein, the tradition of distribution of food to the men and boys before the women and small children must be discussed as a tradition which does not provide for the nutritional needs of these groups.

E. Child Care

Child care is not a new topic on the home economics curriculum and it has not been revised with the new curriculum. This research has exposed some areas which are extremely important in this area, which are either not being taught or are not being put across to the students effectively. Since malnutrition of children between the ages of two and five is so serious a problem in Swaziland, this should be the major focus of the section. It may indeed be the most important topic which a student of home economics can learn. The topic does not recieve the emphasis which it needs.

1. Breast-feeding

Breast-feeding is a very common practice in Swaziland and children are therefore well nourished up until the time they are weaned. The maintenance of tradition in this instance is very beneficial to the health of the child and the tradition has been reinforced via a national public education campaign encouraging mothers to breast-feed. The attitudes of respondents in both groups reflect the popular attitude toward breast-feeding--all respondents agree that breast milk is the best food for the infant and almost all respondents believed that one to two years was the ideal length of time to breast-feed a child. In this case, home economics was not likely a factor in producing the attitude, but it remains a crucial topic nonetheless.

There was a change in attitude toward the practice of withholding breast milk from the newborn until the colostrum supply was depleted; most of group 1 believed the child should not be breast-fed immediately after birth and most of group 2 expressed the converse view. This topic is not specifically addressed in the curriculum, so it is difficult to say whether studying home economics was a factor in the change of attitude. The nutritional benefits of colostrum, the first secretion of the mammary glands, should be discussed in home economics so that students develop the attitude because of a scientific reasoning. The fact that young women believe a child should be breast-fed immediately after birth may not be enough to cause them to actually do so, if there is someone else on the homestead with more authority than she has who will prevent her from breast-feeding until the colostrum is no longer being secreted. By teaching the reasons why the child should be breast-fed immediately after birth, the knowledge is likely to influence attitudes and behaviors.

2. Infant Feeding

There was not an adequate level of awareness of appropriate feeding practices for young children among respondents who had completed home economics. This indicates another area where the curriculum fails to focus on local needs. Respondents were not well informed on the appropriate time to begin introducing solid foods to infants, nor did they realize the importance of supplying key nutrients to young

children. The curriculum must clearly state that these topics be covered in detail.

There was no difference in the attitudes held by the two groups on the best age at which to begin feeding a child solid foods. Responses were scattered between 3 months and 1 year as the most appropriate age. While a healthy child from a healthy mother will be born with a six month supply of iron in its liver, the high rate of anemia among pregnant Swazi women often results in many children being born with iron that will last only three months. It is therefore crucial that all Swazi children begin eating iron-rich foods at age three months. All students who complete home economics should be aware of the importance of feeding children this kind of food at this age.

Responses on the most appropriate types of food for infants indicated that respondents from both groups were not well informed of the nutritional needs of young children. The most important food for this age group are protein-rich foods as well as fruits and vegetables which supply essential vitamins and minerals. The most commonly mentioned foods were porridge and mashed potatoes, both of which are easy foods for the child to eat but neither of which supply enough of the essential nutrients. All students who complete home economics should know how to supply young children with these essential nutrients. Eggs, cow's milk or mashed beans should always be mixed with the porridge and juices, soft fruit or mashed vegetables such as pumpkin or greens should be given to young children daily. Prepared baby foods can be mentioned in the

curriculum but not emphasized since they are expensive and good nutrition can be acquired without the expense. Students should be given the tools to feed young children properly using minimal resources.

Although respondents from group 2 were more aware of the importance of giving protein to children who have been weaned from breast milk, this awareness was not universal. It must be emphasized that the child needs a diet which is qualitatively different from that which the rest of the family needs. These children should not be fed last, as tradition dictates and they should not be fed out of a common bowl since they do not have the manual dexterity to eat as fast as the older children who share the bowl. This topic should be taught with direct reference to the drastic increase in cases of Kwashiorkor at this age, and its link to death, the increased susceptibility to disease and retardation of brain growth. If the ideas are put across in these harsh terms, changes in attitude and behavior will be much more likely.

3. Child Health

a. Enemas

This is not a topic which is specifically addressed in the curriculum, but is important enough to be included. Most respondents from both groups agreed that children should not be given enemas, but a

significant proportion believed that children needed them. The practice is unnecessary and may be harmful to the child and should be discussed in this light in the home economics classroom.

b. Diarrhea

There was a good level of awareness of the dehydration therapy treatment for diarrhea among both groups of respondents, but this was a result of the public education program which had been conducted on a broad scale in the country. Awareness was not, however, universal among group 2 respondents. Dehydration therapy should be taught to students as crucial to saving the life of a malnourished child; students should all be aware that the weakened body of the malnourished child can be killed by diarrhea. The lesson should also be a practical one so that students will know how to mix the solution using the correct proportions of water, salt and sugar. This therapy must be done immediately and at home, since a child may die in the time it takes to transport him or her to a clinic. This topic should be taught in conjunction with hygiene so that students are aware of the reasons why children get diarrhea in the first place.

c. Consultation of Modern Health Practitioners

There was a positive change in the awareness of the reasons for taking children to modern health establishments--respondents in

group 2 were much more aware than those in group 1 that children needed to be immunized and weighed regularly. However, group 2 seldom indicated the reason that weighing is important. A direct link needs to be established between growth, health and nutrition--students should be well aware that a failure to grow indicates the first stage of malnutrition. The students need to have a more comprehensive knowledge of which diseases are common and how to prevent them. The curriculum should be more specific on which diseases these are and it should directly address those which cannot be cured with traditional medicine.

F. Clothing and Textiles

There was generally a poor reaction to this section of the course by students who had completed it--their interest was generally low and their awareness of textile theory was poor. It is difficult to say for certain whether this section has suffered since the curriculum integrated it with foods and nutrition, or whether this attitude to clothing and textiles was prevalent before the integration. It is the least important section of the course in terms of the way it deals with family problems and in terms of its potential for improving family life. The time constraint seems to have affected this section the most, perhaps because teachers see it as less important and they therefore devote less of their limited available time to clothing and textiles.

1. Sewing

A much different attitude toward sewing was expressed by respondents who had completed home economics. Whereas most students just beginning the course were keenly interested in learning to sew, many of those who had completed the course were not interested in sewing. These respondents either did not find the skill useful or they did not like sewing. Some had found it difficult and said that they were not given enough time to learn to sew. Teachers concurred that the lack of time was a problem. It is possible that some students after having been taught sewing, realize that it is not an easy skill to develop to a state of proficiency and therefore no longer view it as a useful skill to learn. In Swaziland, where ready-made garments can be purchased at minimal cost, and where fabric is not inexpensive and patterns are difficult to find, the cost benefit of sewing clothing is not enough of an incentive to sew when the time of most women is limited and unless their sewing skills are proficient enough to construct a garment which looks as professionally sewn as a ready-made garment.

Investment in a sewing machine is a big expense to a family with minimal resources. Unless it can bring returns to that investment by saving money on the purchase of clothing, it is not worth the expense. And many families who do own a sewing machine find that when it breaks down, there are not adequate facilities available for repairing the machines. Considering these circumstances, a course

which teaches sewing should also teach some basic mechanical repair techniques for sewing machines.

Teaching pattern drafting is a possible solution of the problem of commercial patterns not being readily available, but it is a skill that the seamstress must be very good at if it is to benefit her. With the limited time available and the fact that teachers themselves are not highly proficient in the skill, severely limits the usefulness of teaching drafting in this home economics course.

2. *Textiles*

Respondents who had completed home economics had a very poor level of awareness of textile theory. Very few were able to identify the fiber content of fabric or of ready-made clothing, simply by looking at the label. Unless a fabric can be identified, any knowledge of the properties or correct care of the fabric are futile. It is likely that students were not presented with information on textiles in a way that allowed them to apply what they had learned. Teachers found the topic far too complex and therefore difficult to teach. Resources for teaching are a big problem here--the textbooks available do not present the information in an interesting or relevant manner. With better resources, possibly students would be able to learn textile theory in a way that would make them able to apply their knowledge.

3. Repairs

Although most respondents from both groups indicated that they knew how to repair worn or damaged clothing, it is not clear how much they learn about patching and darning in home economics. Durable techniques of repair that are well done do not take away from the esthetic appeal of a garment and can reduce clothing expenses for the family. Patching and darning should therefore be an important topic in this section and can be taught by students bringing articles from home for repair.

4. Handicrafts

Most home economics classes did not have time to teach the handicrafts which had been added to the curriculum. Since the students' work was not evaluated, this was one of the most frequently omitted topics of the syllabus. Teachers admitted they did not teach handicrafts and there were no more respondents in group 2 who possessed the skills than there were in group 1. Students were, however, very interested in learning how to do handicrafts, some because they thought they could make money by selling their work. Handicrafts would be a good topic to include in the curriculum, if sufficient time were available.

5. Laundry

This topic was successfully presented to students in home economics. This was indicated by the greater awareness by respondents in group 2 of the important factors involved in laundering clothing. It is important to know how to take proper care of clothing, especially when resources available for purchasing new clothing may not be plentiful.

G. Teachers' Concerns

1. Time

The shortage of time is a contextual factor which severely limits the extent to which this revised curriculum can be successfully implemented. Teachers were not able to deliver the program in an efficient or effective manner. The constraint imposed by the shortage of time is not surprising; the combination of two separate courses with additional topics to form a course which was allotted only a slightly expanded class time was bound to meet with some problems.

The suggestion made by several of the teachers, to revert to teaching two courses, and incorporate the new topics into the most appropriate course, is the best solution to this problem. The health and hygiene and family living sections could be incorporated into

foods and nutrition, possibly calling this new course 'home economics' to broaden the scope enough to permit the inclusion of these new topics. Handicrafts could be incorporated into Clothing and Textiles. 'Home economics' should be a compulsory course for all female students, because the nature of the topics makes them much more crucial than Clothing and Textiles to the improvement of family life. Ideally all males should take the course as well, since many of the issues require a change of attitudes and practices of the male population. However, if the course were made compulsory even for the females, time would be needed to train enough teachers and to equip all the schools. A commitment on the part of the Ministry of Education would be necessary to ensure that funds would be made available for this change.

2. *Assessment*

The methods used to assess student progress during the course could have affected the way the course was taught to them. Although only two teachers commented on the exams being too easy, not one of the group 2 respondents found them difficult. It is very likely that the written exams are not challenging enough and that their complexity should be increased. Students would thereby be demanded to achieve a more comprehensive level of understanding of the issues discussed in the course. If possible, the length of time allotted for practical exams should be increased so that pressure can be taken off the students and they can perform at their optimum level.

Responsibility for continuous assessment of practical sewing should be handed over to teachers because it is not possible for inspectors to do a proper evaluation of hundreds of students' work in the very short time available to them.

3. Finances

The two aspects of this concern, the amount of money available to teach home economics and the degree of access teachers have to that money are contextual factors which affect the way in which the course is delivered to students. The attitude which the Ministry of Education holds toward home economics is reflected in the action they have taken whereby subsidies to home economics departments have been cut off completely. This action indicates a belief that home economics is not an important course to teach. If the curriculum were improved so that it addressed some of the problems which exist within the country, and a good presentation of this case were made to those who hold authority within the Ministry, possibly this attitude could be changed. But when the general trend of government policy is considered, it is not surprising that home economics is not a priority within education. Teachers will have to adapt themselves to the situation by taking the initiative to raise more of their own funds, if the home economics program is to survive.

The problem which some of the teachers have gaining access to funds which are collected from home economics students, and now constitute the entire home economics budget, must be solved. It is difficult enough to conduct the course now that government subsidies have ceased; access to this money must somehow be ensured. No matter how much other departments in a school may need money, they cannot be allowed to use fees which have been collected for home economics departments. The home economics inspectorate has taken steps to ensure that headmasters are aware of the correct procedures that must be used in the dispersal of these funds, but in some schools this has not been effective. Possibly schools should go back to the system whereby teachers collect their own home economics fees and are held completely accountable for this money. Spot audits and serious disciplining of teachers who cannot account for their funds would help to ensure that the money was not misused.

4. Resources

The shortage of resources available for teachers is another contextual factor which seriously limits the extent to which the course can be delivered effectively. Teachers do not have the tools with which to deal with the new topics, and the resources available for the entire course are not prepared specifically for Swaziland. There is a movement afoot by the home economics Association to develop some resources which are appropriate to the Swazi situation. This is a

very positive step, since the home economics inspectorate of the Ministry of Education does not have the financial resources, nor do they have the human resources to produce teaching resources. Resources must be presented to teachers through in-service education which will show them the appropriate methods in which to approach teaching of home economics.

5. *Streaming*

The attitude that home economics is a course designed for students who are not academically inclined is a contextual factor which limits the effectiveness of the course. It limits the numbers of students who are exposed to the material and helps produce a negative attitude toward the course among those who do take it. Requiring all students, or at least all female students to take the course would help to solve this problem. At the very least, students should be allowed to choose for themselves whether they wish to take home economics.

H. Conclusion

The revised, integrated home economics Curriculum has been fairly successful in terms of producing attitude and behavior changes among students who have completed the course. When the constraints imposed by Swazi society and those imposed by the contextual factors which inhibit the effective teaching of the

curriculum are considered, the degree of change among students who have taken the course is encouraging. If the contextual factors can be eliminated and the curriculum itself improved, the changes of attitude and behavior of students who study home economics will be more significant.

The most serious constraint on the effective implementation of this curriculum that must be dealt with by the Ministry of Education is the shortage of time. It would be useful for home economics to be separated into two courses, with the new sections incorporated into these courses. This would allow teachers enough time to cover the syllabus in a thorough manner. The Foods and Nutrition section should also be made compulsory for all female students and if possible, for all students. Clothing and Textiles should be an optional subject.

The curriculum itself must be changed somewhat and laid out in a more comprehensive manner so that teachers have a clear idea of how to approach the subject. Although the revised curriculum has made some positive additions to the curriculum, further changes are necessary to focus the course on the needs of Swazi society. The revisions proposed have been outlined in this chapter, the most crucial changes being those which deal with hygiene and nutrition. The health and hygiene section must direct itself to local needs by including major sections on the use of hygienic water and the proper disposal of rubbish and human waste. These must be taught in the context of the types of disease which can be caused by poor hygiene.

Topics which deal with nutrition, including child care and pregnancy, must be tailored to better fit the needs of the local situation. Students must become aware of how to acquire a nutritious diet with minimal resources, with a strong emphasis placed on providing adequate protein to children and women in their child-bearing years.

Resources need to be developed and in-service education conducted, in order for the revised curriculum to be implemented effectively. This will help to further clarify topics for teachers and to give them ideas on how to present the material more effectively. The Ministry should work together with the Home Economics Association to this end.

Home economics taught at the Junior Certificate level has the potential to change the future lives of the students who take the course, and the lives of the families they will be part of. The revised curriculum has helped to make the course more relevant to these students, and with some further revision it will be a more effective means of improving family life in Swaziland.

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